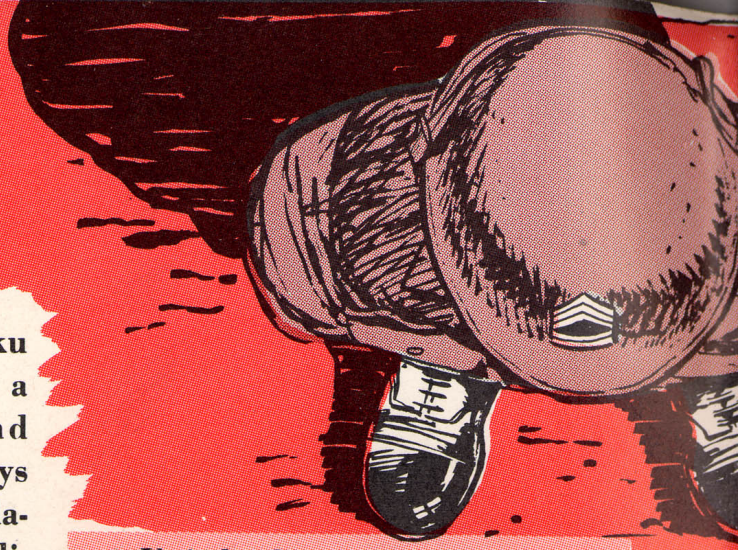
Issue 161
PS
1966 Series
THE
PREVENTI
MAINTENAN
NTH
Gasthaus
549, 673 DM FOR MANEUVER DAMAGE UND 13 DM FOR MOMMA'S SCHNITZLE... UND ALZO I SUGGEST YOU CHECK DER DRIVE BELTS UND TRACKS MORE OFTEN, JA?
Will Eisner

FOR COMBAT READINESS
YOUR OUTFIT NEEDS—

COMMAND EMPHASIS

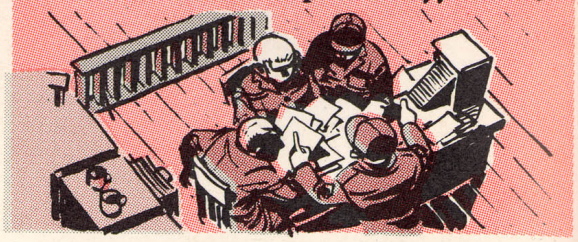


Everybody from Fulda to Plieku will tell you that maintenance is a Command Responsibility. And they're right. But what a lot of guys sometimes forget is that all the hullabaloo about Command Responsibility's not worth two-bits unless it's teamed up with Command Emphasis.

That's right . . . *Command Emphasis!*

Command Emphasis means . . . .

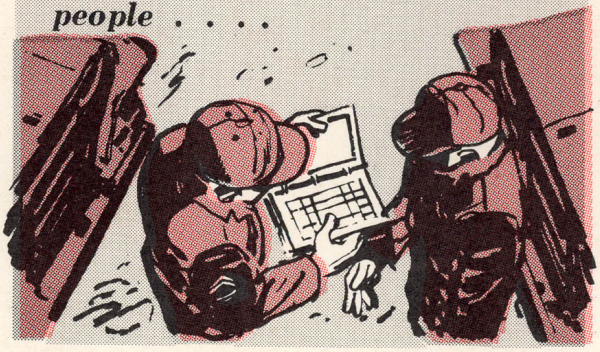
Unit leaders seeing that parts requisitions are made out right and the PLL is up to snuff . . . .



Platoon commanders making sure there's plenty time for maintenance training, enough tools, parts and TM's . . . .

Squad leaders seeing that equipment is not abused or carelessly handled . . . .

Section leaders checking TAERS forms before they're turned over to the shop people . . . .



And every commander conducting daily planned supervisors' inspections, with all unit supervisors present, supervising maintenance work . . .

. . . Just to mention a few things.

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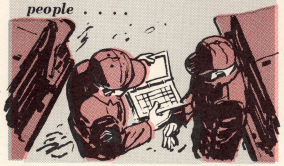

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Command Emphasis is simply putting each responsible commander in charge of the maintenance show . . . especially the first-line commander.

It's the shot that quickens the maintenance pulse of any outfit that'll apply it; it's the stuff that'll make sure that equipment won't fall flat on its rear differential when it's needed to get you thru a tight free-for-all.

It works for all levels of command . . . generals . . . colonels, captains, lieutenants . . . right down to noncoms.

The commander, no matter who or where, is the guy who can put Command Emphasis to work to get results. It won't work too well if it starts just half-way down the line; nor when maintenance is left to technical people only.

Command Emphasis works best when it stays within the command line. So, keep it there and push it all the way. It's your sure way to keep your maintenance up and your fighting gear combat ready.

Ask any outfit that's using Command Emphasis.

PS

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Issue No. 161 1966 Series

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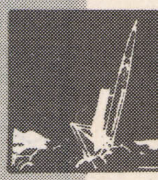

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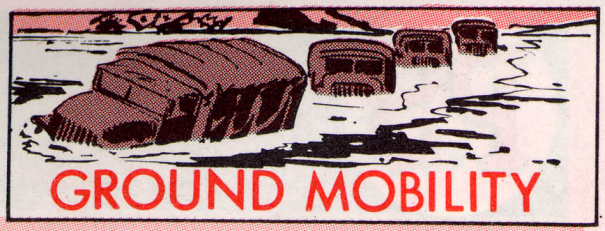
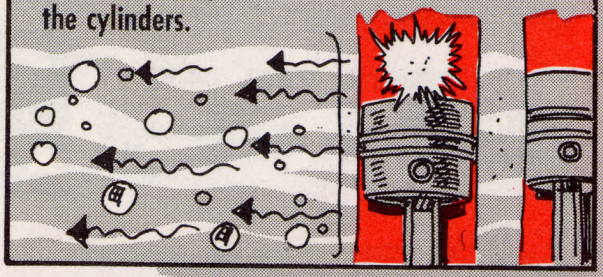


GROUND MOBILITY

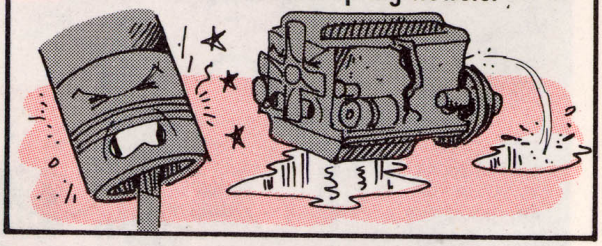
Calm and collected add up to trouble for your equipment that depends on a liquid cooling system to shed excess engine heat.

How so? Like so —

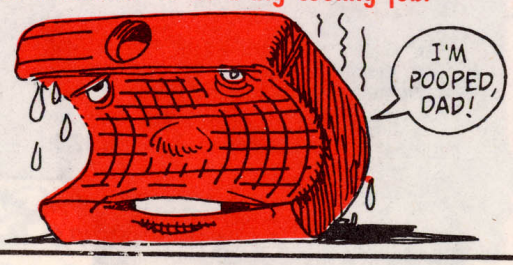
Coolant should tear through the engine and radiator as fast as the water pump'll move it to carry off that blast-furnace heat in the cylinders.



Sluggish or choked flow of coolant builds up heat and pressure that'll have pistons seizing, the block cracking, gaskets blowing and leaks bustin' out like spring flowers.



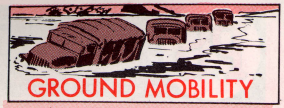
And that's what'll happen if your cooling system has collected a lot of rust 'n' junk. This stuff acts like insulation between the cylinders and coolant passages, making it harder for the coolant to soak up heat. Radiator core tubes get plugged up so you maybe got only half a radiator to do a big cooling job.



FOR ENGINE COOLING . . .

NEITHER CALM

So what's to do? You use rust inhibitor to keep the cooling system clear. Or, if someone goofed up on your equipment before you got it, you clean the cooling system with special chemicals — and then give it protection with inhibitor.



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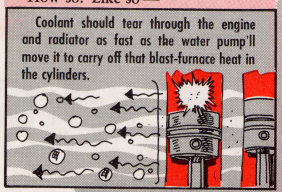

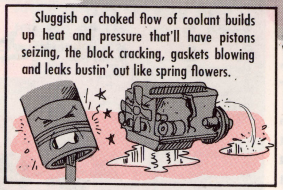

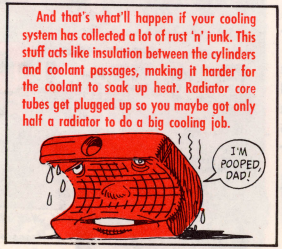

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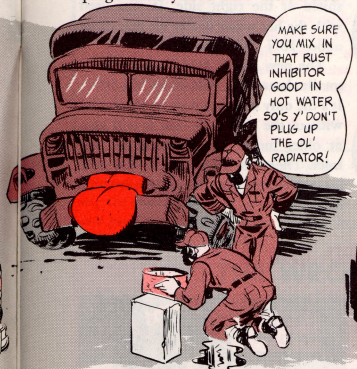
NOR COLLECTED

As soon as you get the word to drain out your winter antifreeze, you declare war on rust in your cooling system. Whoa a sec, tho — if you're in a combat-ready outfit, you don't want to start opening petcocks and taking out drain plugs until you're sure there's anti-

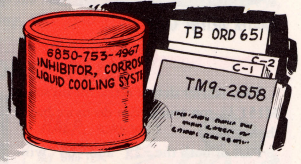


freeze in stock to protect your cooling system next winter.

Now, when you're workin' over your cooling system, it's no time for a guessin' game. Pull out your copy of TB ORD 651 (Apr 64) and TM 9-2858 (May 45) with Changes 1 and 2 and soak up the right dope on draining, flushing, inspecting and cleaning. You'll notice that runnin' high-powered cleaner through your cooling system is only for when you see signs that it's really needed — like a lot of rust or gooky stuff comin' out when you drain the system.

Rust inhibitor comes on the scene when you're all done and ready to button up the job. Adding inhibitor isn't quite as easy as just dumping the stuff into your radiator, tho. You can plug up your radiator solid if you don't mix the inhibitor in water first.

Use Inhibitor, Corrosion, Liquid System, Powder Form, Mil Spec O-I-490-A, that's listed in Federal Supply Catalog C6800-IL (Jan 66) under FSN 6850-753-4967. This inhibitor supersedes the one listed in TB Ord 651 (Apr 64). The stuff comes in a 6-oz can and is enough for 12 quarts of water that's used in preparing the solution. So, get as many cans as you need to match your cooling system's capacity.



USE ONLY MIL SPEC O-I-490-A
FSN 6850-753-4967

It dissolves best in hot water. But, you say, hot water isn't always handy. Sure it is, right in your cooling system. When you've given your cooling system its final filling of clean water, just run the engine until the water heats up to 170°, drain out about a third of this hot water into a clean 5-gal can, and dissolve the inhibitor in it. Then just dump this inhibitor solution into your radiator and you won't have to lose sleep worrying about rust fouling up your engine's cooling system.

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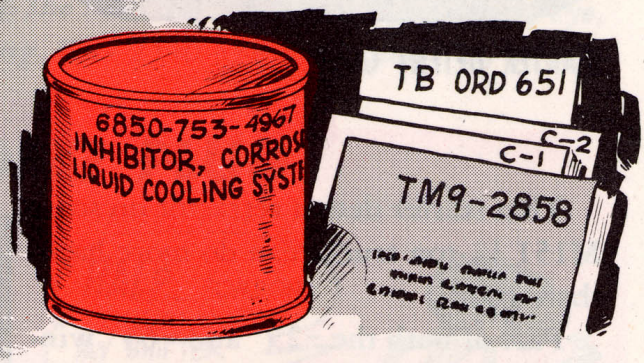

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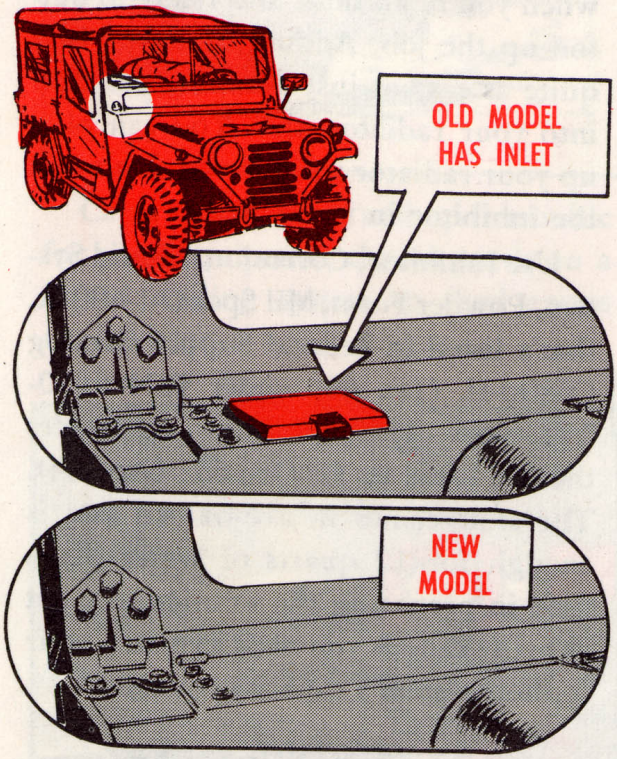
INLET IS OUT



Notice something different about your new M151 ¼-ton truck (Ford make above serial number 2G-0668)? Quite a few things, eh?

One of 'em is the missing fresh-air inlet that was just in front of the windshield at the right side. It was used with the hot water heater kit that came under FSN 2540-786-3871.

The new model M151 takes a new, smaller heater kit, FSN 2540-764-5917. It's the only one that'll go in the model without the air inlet—but it will also fit older model M151's with the air inlet. There are inlet parts in this new kit, which you can discard if you don't need 'em.

STARTER DETENT GOES...

NOT NEEDED ON M151

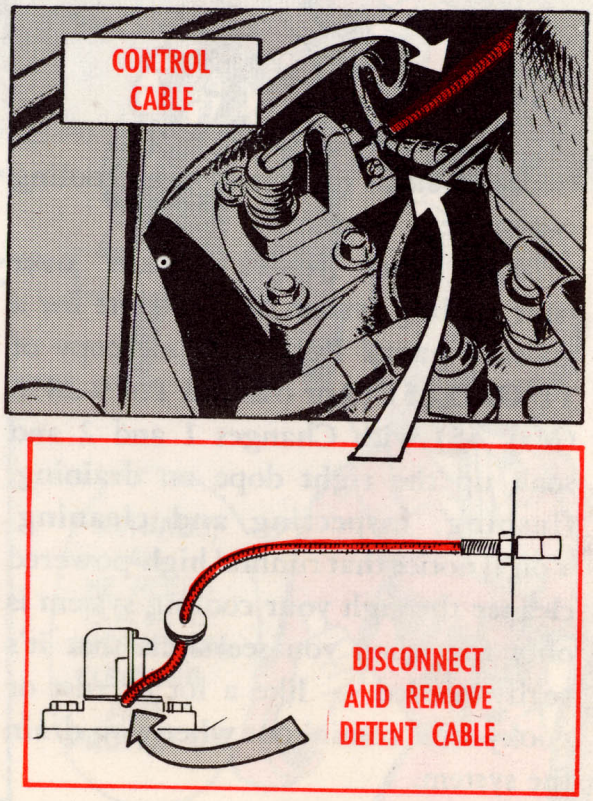
That starter detent retractor on some M151 ¼-ton trucks can do more harm than good.

Part of both the −25° and −65° winterization kits, the gadget was supposed to be used in case a cold starter-drive gear was sticky and wouldn't slide out to engage the flywheel. But some guys were too slow releasing the control cable. Other damage came from accidentally pulling out the control while the motor was running.

So now the control cable has to be disconnected and taken right out. Paragraph 207a in TM 9-2320-218-20 (Apr 63) tells how.

The detent retractor stays put.

New models of both winterization kits won't include the starter detent.



COUSIN TO RESCUE

M151 LIFTING SHACKLES

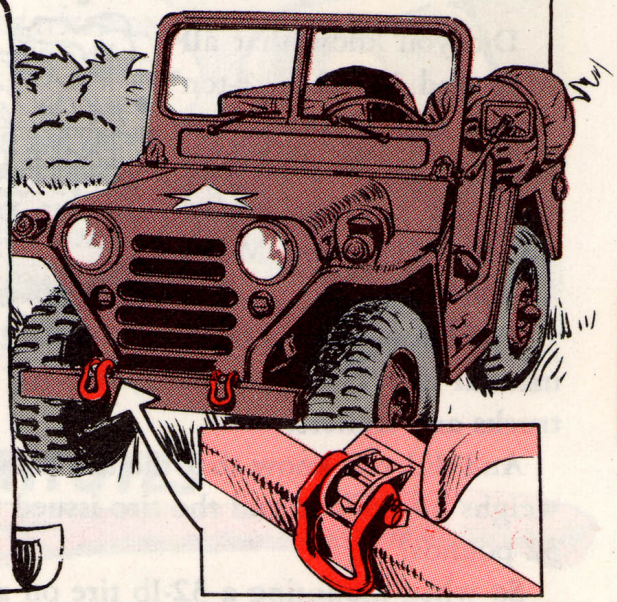
Dear Editor,

Missing or mangled lifting shackles for our M151 ¼-ton trucks aren't hard to replace now we know where to look.

The M38A1 front shackles are practically the same design as those used on both front and back of the M151. All that's needed is to spread the ends apart a little to make 'em fit the M151.

Cannibalization usually offers a good supply of these shackles because they're in supply (FSN 2540-741-0838) for the M38A1.

SP5 George W. Curtis
Fort Riley, Kansas



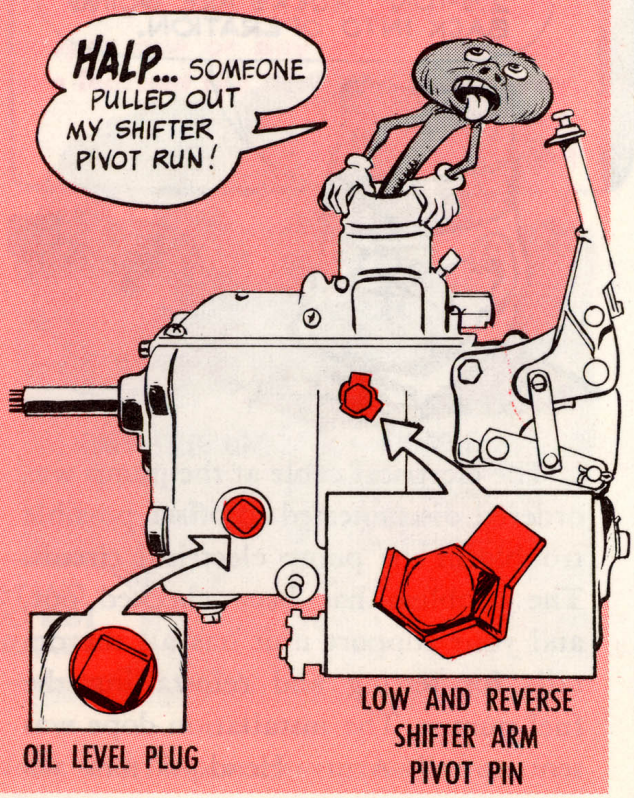
(Ed Note — If heat's needed to spread the shackles, this should be done by your support people, because they'll know the treatment to use to keep from weakening the metal. But now you can get both the M151 lifting shackle, or lifting eye, and pin from supply. They're Eye, Lifting, FSN 2540-678-1342, and Pin, Lifting Eye, FSN 5315-678-1405.)

THE WRONG PLUG

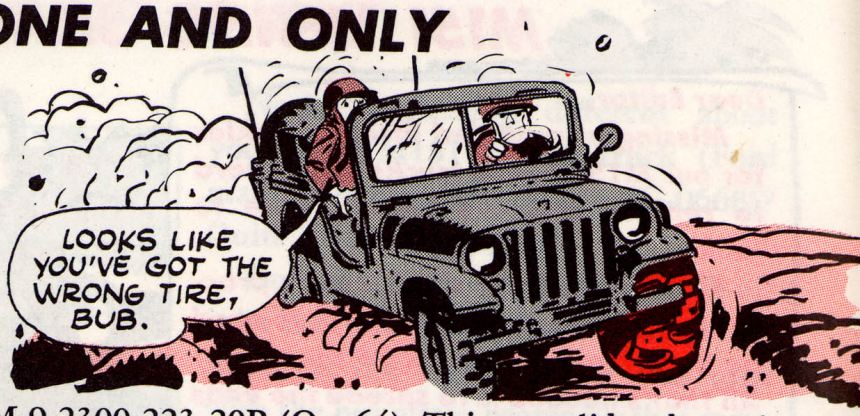
It's mighty easy to mistake the low and reverse gear shifter pivot pin plug for the oil-level plug in the transmission of the M151 ¼-ton truck. Here's a fix that oughta make a guy think twice before screwin' the wrong one out.

Just bend up another prong on the lock tab of the pivot pin. This way you have at least two prongs locking the pin in place.

If the pin is taken out by mistake, the shifting lever drops down. Trying to find the shift lever without taking the top of the transmission off is just plain folly. Nine times out of 10, it'd mean a ruined transmission. So make sure you take out the oil level plug—not the pivot pin.



ONE AND ONLY



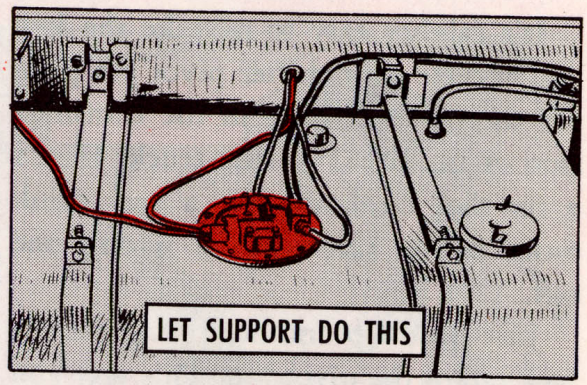
Did you know that all M38 and M38A1 ¼-ton trucks and M100 ¼-ton trailers now get shod with the same tire that's used on the M151 and M416 ¼-ton vehicles?

The latest word is in TM 9-2300-223-20P (Oct 64). This consolidated supply manual lists Tire, Pneumatic, 700-16, 6-ply, FSN 2610-678-1363 for all ¼-ton trucks and trailers.

And did you know that the tire previously issued for the M38 ¼-ton vehicles weighs 38 pounds and the tire issued under FSN 2610-678-1363 weighs only 32 pounds?

So when mounting a 32-lb tire on a vehicle that already has 38-lb tires, do it in pairs. Put both tires either on the front or rear axle. Mixing different weights on one axle will cause an unbalanced condition — which isn't good for the driver, the vehicle or the tires.

M35A1 FUEL PUMPS



The electrical cable at the pump was ordered disconnected to offset possible trouble in the pump electrical circuit. The problem has been checked out, and your support unit has all the details for testing and reinstalling the fuel pumps. The installation dope was sent to all Army Headquarters via ATAC Teletype No. 11-11807 (Nov 64).

If your support didn't get the word or if they have any questions on the installation procedure, tell 'em to get in touch with U.S. Army Tank-Automotive Center, ATTN: SMOTA-MP, Warren, Michigan 48090.

And don't try making the installation yourself. It's a support job.

CAP 'N' CHAIN FSN

Ho, there, deuce-and-a-halfers! To get the cap and chain for the air valve under the dash, use FSN 2530-575-5404.

LEARNING THE HARD WAY...

NO SUBSTITUTES

Dear Editor,

We're not too proud of a boner our shop pulled. I'll let you in on it if you promise not to tell who we are.

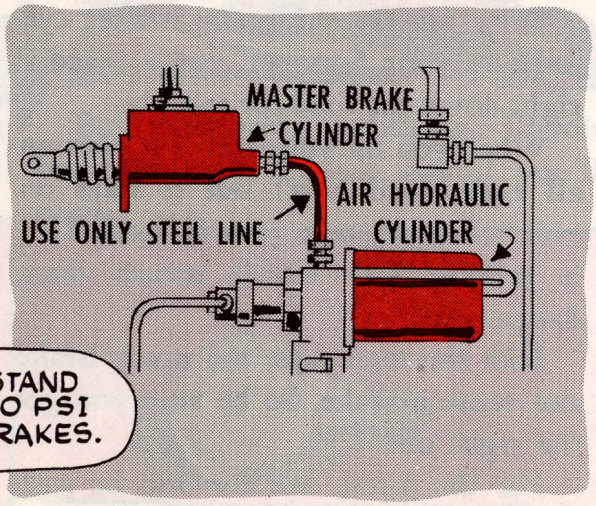
One of our Reos developed a bum master brake cylinder. So we pulled it and put in a new one. While doing the job the metal line going to the air hydraulic cylinder got messed up so bad it needed replacing. Not having a new line handy and anxious to get the truck off deadline, we substituted a home-made job made up from copper tubing.

A week later the same 2½-ton truck plowed through a stop light, smashed two civilian vehicles and rolled over an embankment; the truck was a total loss.

Cause of the accident: The copper line we substituted couldn't stand the high hydraulic pressure when the driver jammed on his brakes. It burst, and the brakeless truck rolled at 40-MPH into a busy intersection.

I'd like to pass on to other outfits that the master brake cylinder-to-air hydraulic cylinder line (FSN 2530-706-1320) is a steel line. Never install a copper one or any other substitute. We learned the hard and costly way.

SFC (Withheld)
Fort (Withheld)



(Ed Note—We read you loud and clear, and I'm sure everybody else will.)

NEED AN M55 TAIL PIPE ?

The tail pipe for the M55 5-ton truck is the same type that's used on the M63, M139 and M246 trucks. The FSN is 2990-591-7696, like it says on page 41 of TM 9-2320-211-20P (Mar 63).

You might want to make a note of this somewhere because page 43 of the -20P has the M55 incorrectly listed with the M40 and M54 trucks, which need a different tail pipe.

Page 31 of the -35P also has the M55 lumped with the wrong series of trucks.

M60A1 TANK VS 5-TON TRUCK

Like you already know, an M60A1 tank is bigger than a 5-ton truck . . . so it figures that the tank master cylinder spring has more zing.

Only thing, both master cylinders look alike and you gotta keep your eye on supply or you'll get the wrong one.

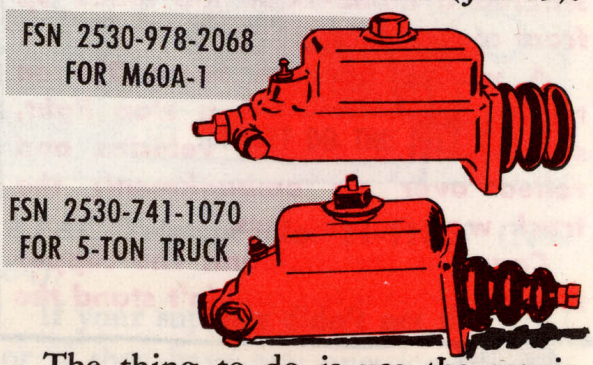
With an M60A1 brake master cylinder in your 5-tonner, you're headed right down the road for trouble.

When you hit your brake it goes on all right (and how) but it stays on even when you take your foot off. This is strictly DD which means darn dangerous.

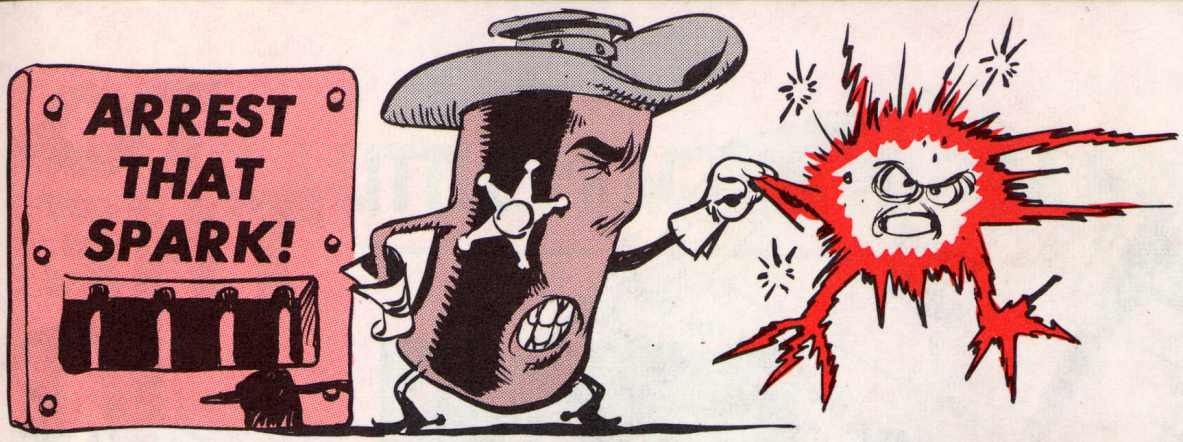
Like the man says, too much brake can cause a wake. So be sure you get the right one.

For the 5-ton, ask for and be sure you get FSN 2530-741-1070, Cylinder: master, assy (63477-FF14130) as listed on page 101 of TM 9-2320-211-20P (Mar 63).

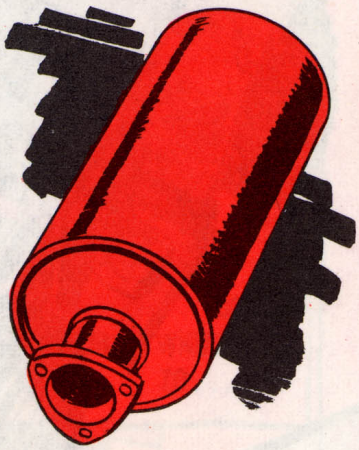
For the M60A1 tank you ask for FSN 2530-978-2068, Cylinder assembly hydraulic: (10916089), on page 2-165 of TM 9-2350-215-20P (Jan 65).



The thing to do is use the repair parts in your equipment's parts manuals. Too often, if you try a criss-cross you can wind up with a double-cross. So, stick to the book and let the Detroit engineers figure out what parts are interchangeable.



You just aren't hip in the ammo-hauling business without a spark arrestor exhaust system on your truck. You need one to keep from blowing up the landscape, equipment and people — including you!



Besides, AR 385-55 (Sep 65), para 19j, says this protection is required.

There's none specified yet for the 10-ton M123 or M123C truck-tractor or M125 cargo truck, but you can use the same one now listed in TM 9-2320-211-20P (Mar 63) for the 5-ton trucks. It's called Muffler, Exhaust, Flame Arrestor, FSN 2990-294-2257.

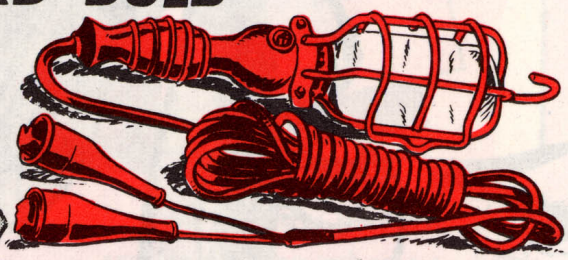
Remember, the rule whether you need a spark arrester muffler is when your truck's engine must be running while ammo's being loaded or unloaded . . . like TM 9-1300-206 (Nov 64), paragraph 71b(19) says.

12- OR 24-VOLT CIRCUIT

DROP CORD BULB

Need a 25-watt bulb for this trouble-shooting light that's in your No. 1 or No. 2 Organizational Common Tool Kit?

Light, Extension, FSN 6230-268-9436.



If you're using the extension with a 12-volt battery, order:

FSN 6240-153-6494: Lamp Incandescent, 12-volt, 25-watt med scr base, lamp No. 25A-12.

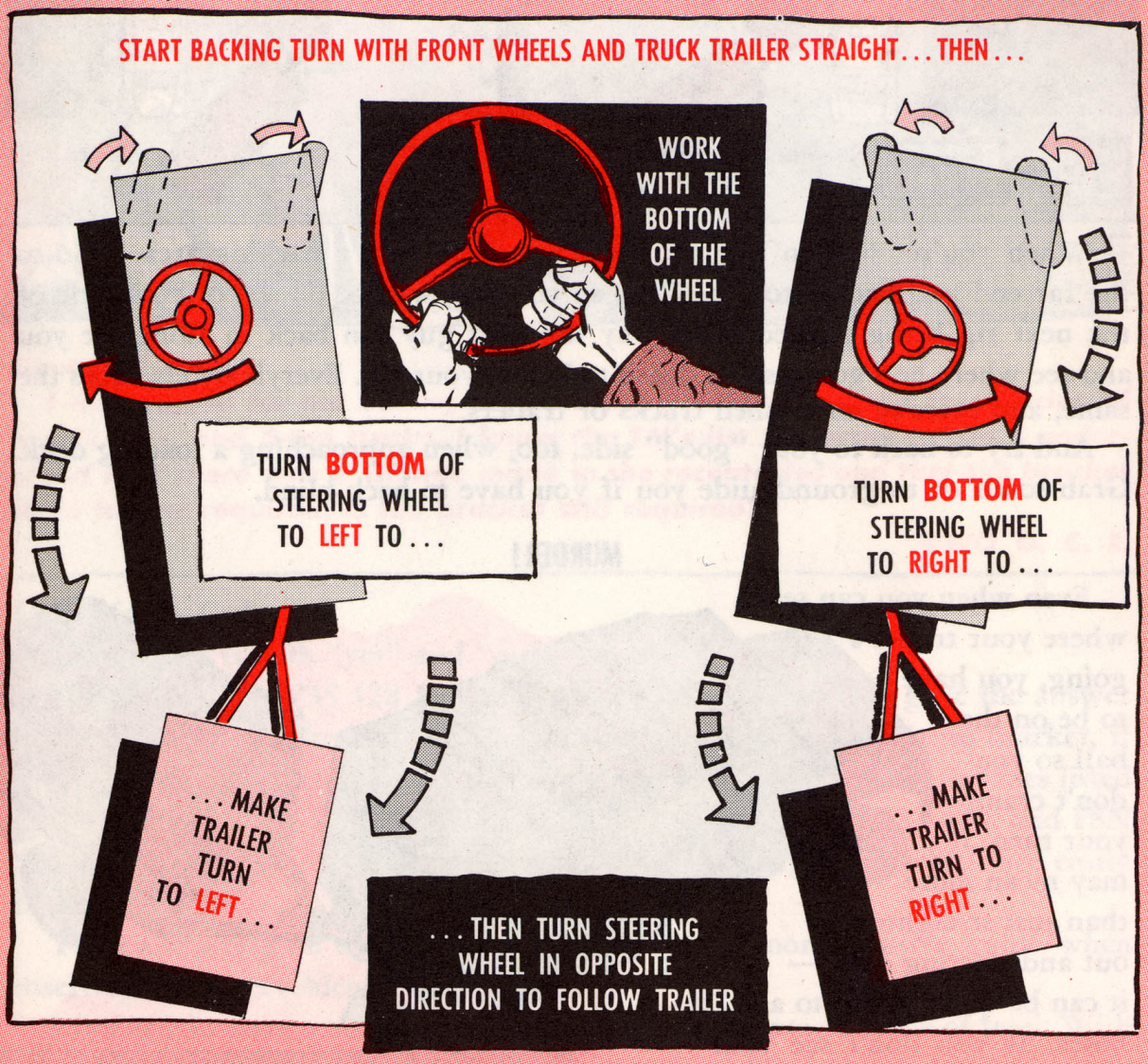
But when using it with two 12-volt batteries or a 24-volt circuit you'll need:

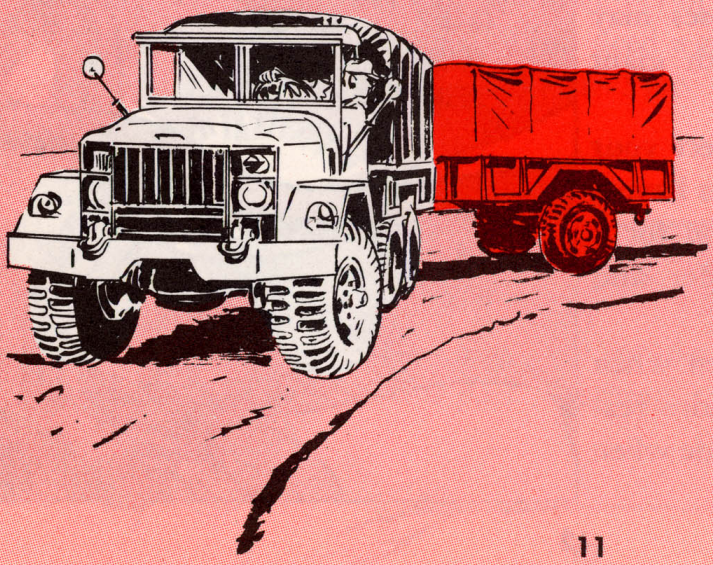
FSN 6240-155-7871: Lamp Incandescent, 25-volt, 25-watt, med scr base, lamp No. 25A25V.

Both bulbs are listed in DoD Catalog C6200-IL-A (Jan 66).

TRAILER TECHNIQUES
Getting the knack of backing a truck-trailer or truck-artillery combo isn't so tough.
The secret is—slo-o-o-w 'n' e-e-e-asy. Remembering when you start a turn to the rear that your extra vehicle is going to take off in the opposite direction from the way the back of your truck is turning. You can turn your steering wheel in the direction you want the trailer to go by placing your hands on the bottom of the wheel instead of at the top. Pretty soon you catch the idea of returning your steering wheel just in time to follow the trailer.
TO THE REAR DRIVE!
IT'S EASY TO CONTROL IF YOU TAKE IT SLOW AND CAREFUL!
You learn that if you wait a second too long, you cramp too tight and have to start all over again.
A little practice and you'll be following that trailer all over the place like a pro, wheeling backward slick 'n' smooth.

IT TAKES A LITTLE PRACTICE TO BE A PRO

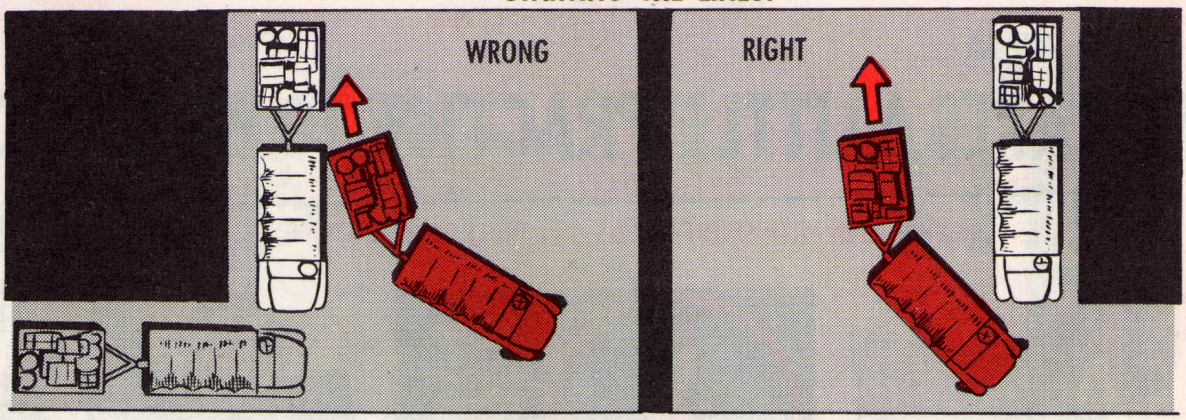




You'll know just where the trailer's going when you back to the left because you can lean out the window and watch. But if you're backing to the right — blind — it's more work and can be rough on the trailer and anything else that's back there. Sometimes you may have to back blind, but it's best all around to back the easy and safe way when you can. That is, to the left.

P.S. MORE

STARTING THE LINEUP

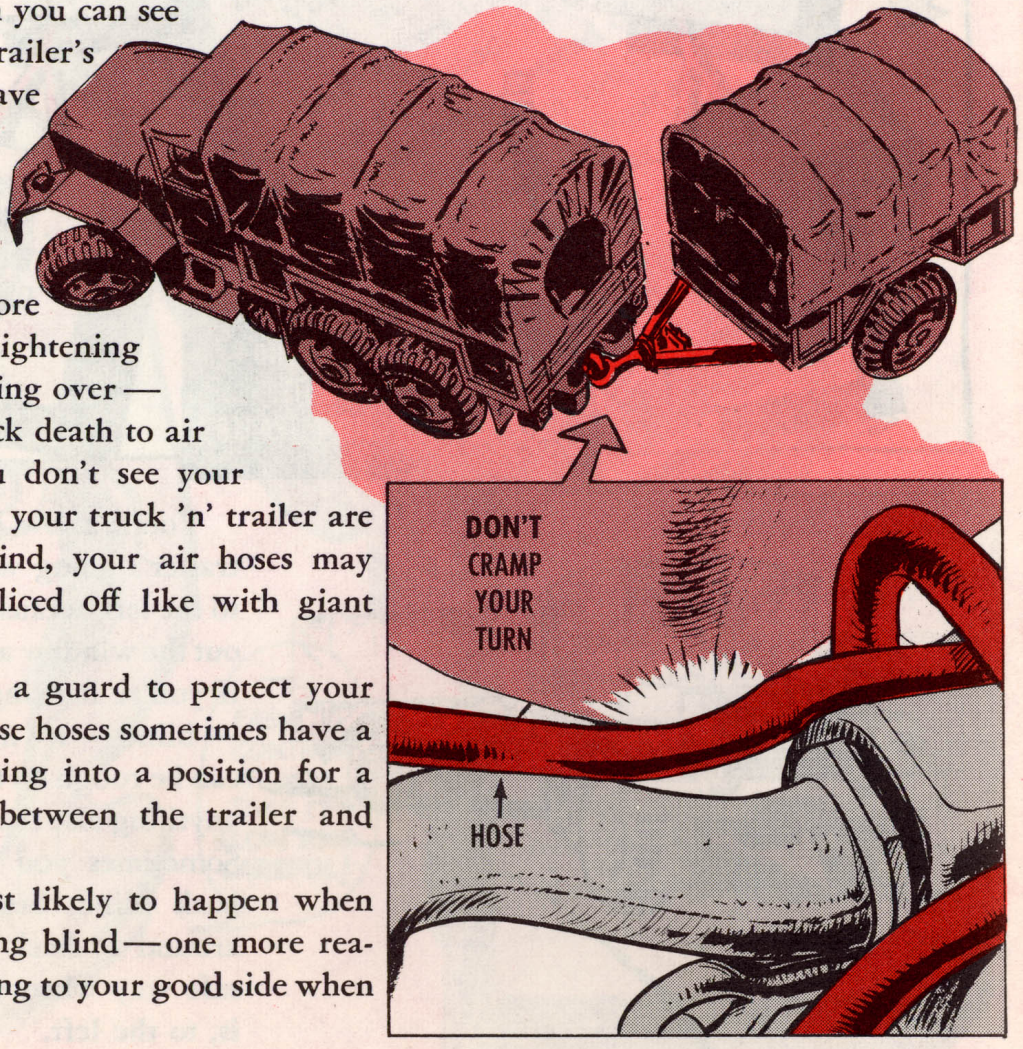


When you're first in a convoy and pulling into a parking area. Go to the far end and back into a position so your rig will be on the driver's side of the next rig being parked. This way the next guy can back in alongside you and see where he's going so he doesn't clobber your rig. Everybody else does the same, and there're no mashed trucks or trailers.

And try to back to your "good" side, too, when approaching a loading dock. Grab someone to groundguide you if you have to back blind.

MURDER!

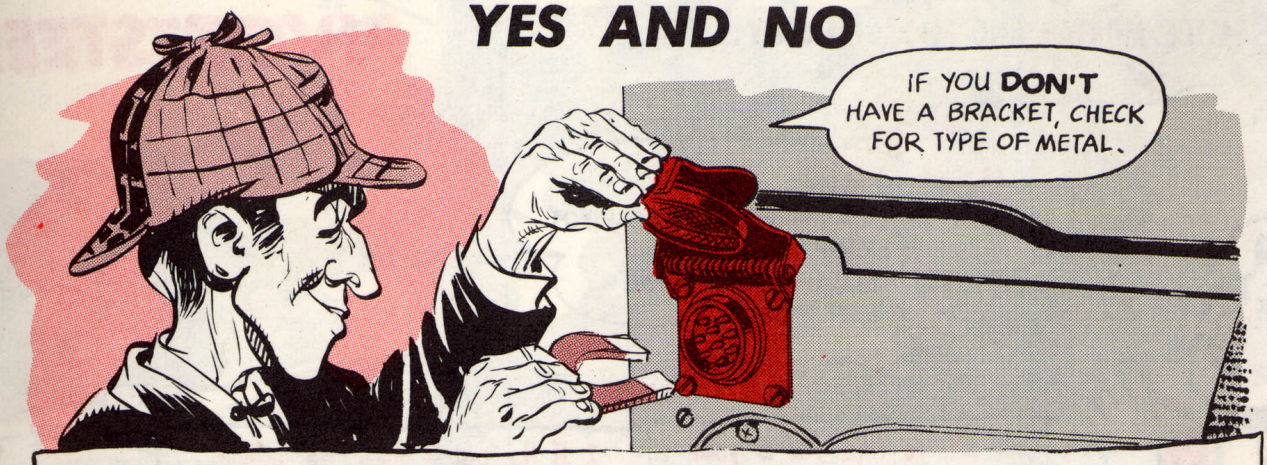
Even when you can see where your trailer's going, you have to be on the ball so you don't cramp your turn. It may mean more than just straightening out and starting over — it can be quick death to air hoses. If you don't see your mistake until your truck 'n' trailer are in a tight bind, your air hoses may already be sliced off like with giant scissors.



Even with a guard to protect your air hoses, those hoses sometimes have a way of flopping into a position for a fatal pinch between the trailer and truck.

This's most likely to happen when you're backing blind — one more reason for backing to your good side when it's possible.

YES AND NO



Dear Half-Mast,

I was gigged for not having the polarizing bracket on the receptacles of my ¾, 2½, and 5-ton trucks. I know the TM's list the bracket, but, I understand that there was a change made in the receptacles and that the bracket is no longer required. Is the bracket still required?

CWO G. C. E.

Dear Mr. G. C. E.,

The answer is both "yes" and "no".

MWO Ord G1-W35 (28 Feb 57), was the publication that gave the answer but it is rescinded. The MWO called out the need for the polarizing bracket, if a vehicle had the earlier type (die-cast) receptacle on it. They are the ones listed in some of the -20P's under FSN 5935-752-5173, FSN 5935-773-1429, and FSN 5935-306-2023. The bracket protects the die-cast receptacles, which are easily broken.

There's a prong on the bracket that gives you a more positive guide when inserting the intervehicular cable plug.

Later trucks have a stronger and more durable receptacle made of steel. With this receptacle, FSN 5935-699-7827, the polarizing bracket is no longer needed.

So that's why the answer can be either yes or no.

Since both receptacles look alike, you need a magnet to tell 'em apart. If the receptacle attracts the magnet, it's the steel job. If not, then it's the die-cast job —and it needs the bracket.

Half-Mast

QUOTE...

"Gasoline must not be used to clean floors, automotive parts, clothing, or similar items."

—TM 743-200

M106 MORTAR AND M113A1 FAMILY . . .

PIVOT STEER

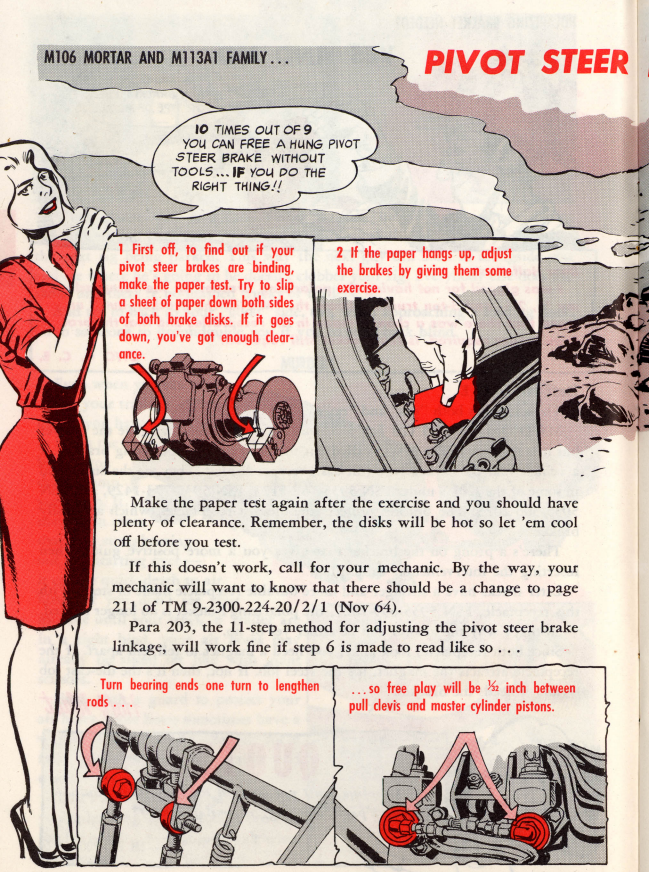
Make the paper test again after the exercise and you should have plenty of clearance. Remember, the disks will be hot so let 'em cool off before you test.

If this doesn't work, call for your mechanic. By the way, your mechanic will want to know that there should be a change to page 211 of TM 9-2300-224-20/2/1 (Nov 64).

Para 203, the 11-step method for adjusting the pivot steer brake linkage, will work fine if step 6 is made to read like so . . .

M106 MORTAR AND M113A1 FAMILY...

PIVOT STEER POINTERS



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Para 203, the 11-step method for adjusting the pivot steer brake linkage, will work fine if step 6 is made to read like so . . .

Thing to remember about the pivot steer is it'll work dandy like candy for steering on water and for low speed, short distance, position maneuvering on land. For regular operation you use the regular steer.

Pivot steer locks the track and at road speeds you'll flip the vehicle over, breaking up the vehicle and everybody in it.

Remember this safety equation:

PIVOT BRAKE BREAK = YOUR NECK

The pivot steer needs regular exercise to keep the brake disks in good condition.

To clean the oil and other crud off the disks give 'em this three-count workout . . .

Remember: Your foot should be entirely off the throttle as the vehicle comes to a stop. If you press on the throttle at the same time you're pulling the pivot steer handles all the way back you can damage the power train.

Finished? Now, do the whole thing two more times and you'll have it knocked.

Exercising your pivot steer like this (every 10 days) keeps it in slim trim for perfect pivoting. 'Course, except in an emergency, you use pivot steer only when your speed is under 10 MPH.

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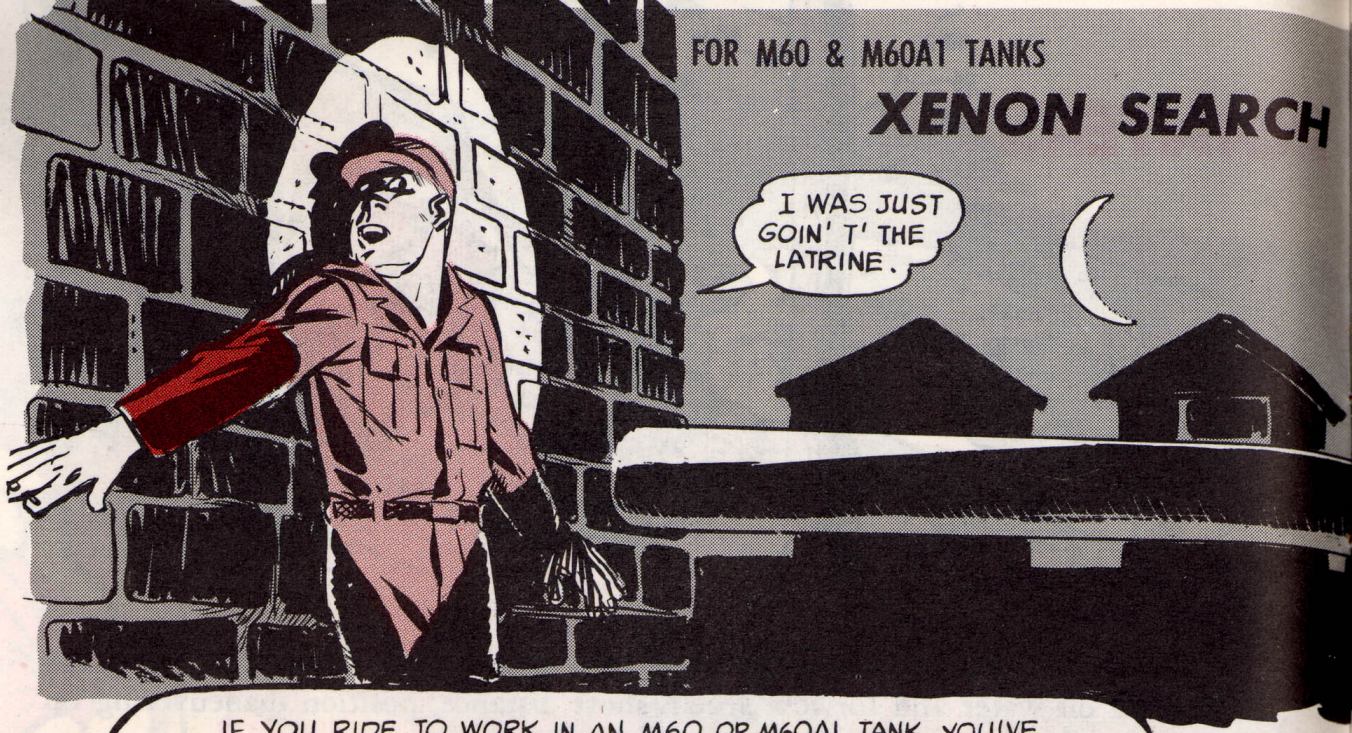
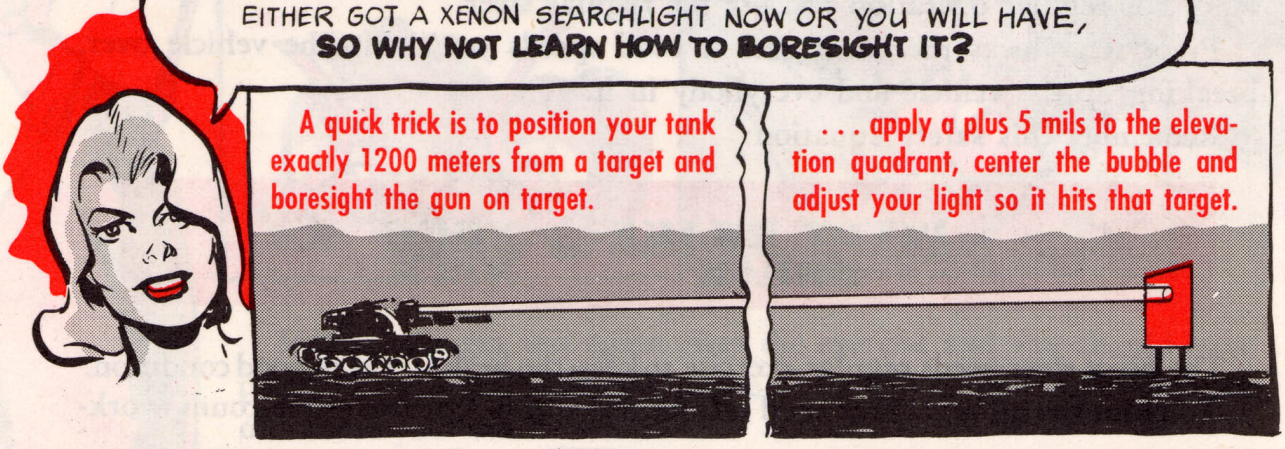
FOR M60 & M60A1 TANKS

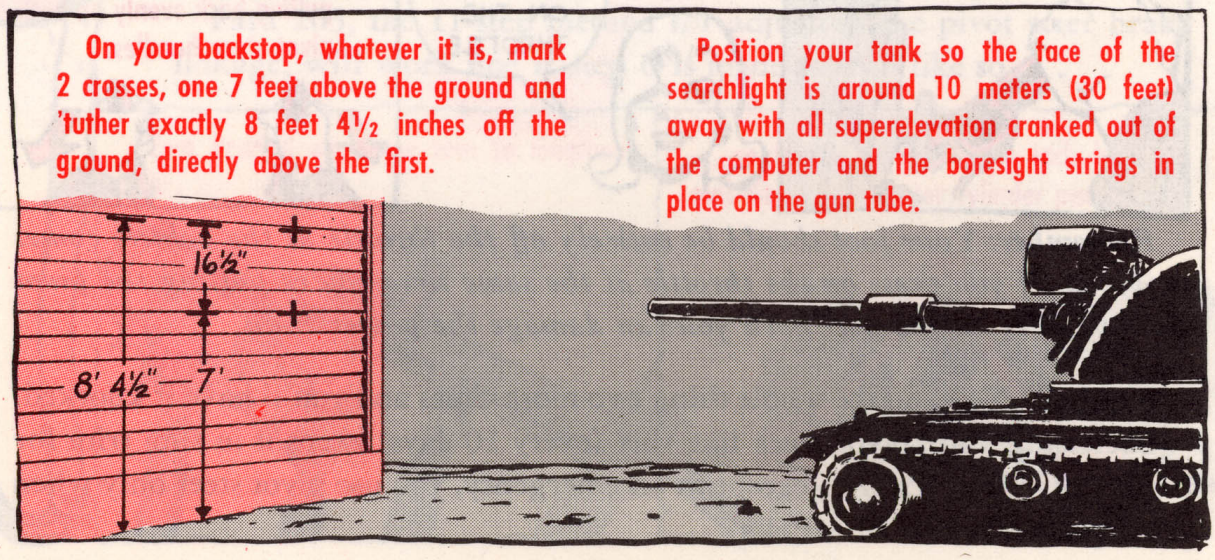
XENON SEARCH



IF YOU RIDE TO WORK IN AN M60 OR M60A1 TANK YOU'VE EITHER GOT A XENON SEARCHLIGHT NOW OR YOU WILL HAVE, **SO WHY NOT LEARN HOW TO BORESIGHT IT?**



Even if you're fresh out of 1200-meter targets you can boresight the light with a backdrop — which can be the wall of a building, side of a van, or anything else that's handy.



FOR M60 & M60A1 TANKS

XENON SEARCH LIGHT BORESIGHT

I WAS JUST GOIN' T' THE LATRINE.

FREEZE, DISEASE!!

IF YOU RIDE TO WORK IN AN M60 OR M60A1 TANK, YOU'VE EITHER GOT A XENON SEARCHLIGHT NOW OR YOU WILL HAVE, **SO WHY NOT LEARN HOW TO BORESIGHT IT?**

A quick trick is to position your tank exactly 1200 meters from a target and boresight the gun on target.

. . . apply a plus 5 mils to the elevation quadrant, center the bubble and adjust your light so it hits that target.

Even if you're fresh out of 1200-meter targets you can boresight the light with a backdrop — which can be the wall of a building, side of a van, or anything else that's handy.

On your backstop, whatever it is, mark 2 crosses, one 7 feet above the ground and 'tuther exactly 8 feet 4½ inches off the ground, directly above the first.

Position your tank so the face of the searchlight is around 10 meters (30 feet) away with all superelevation cranked out of the computer and the boresight strings in place on the gun tube.

16½"

8' 4½"

7'

Now boresight your main gun on the lower cross, and adjust your searchlight so its beam is centered on the upper cross.

With the beam centered on the upper cross make a mark at the top edge of the searchlight beam.

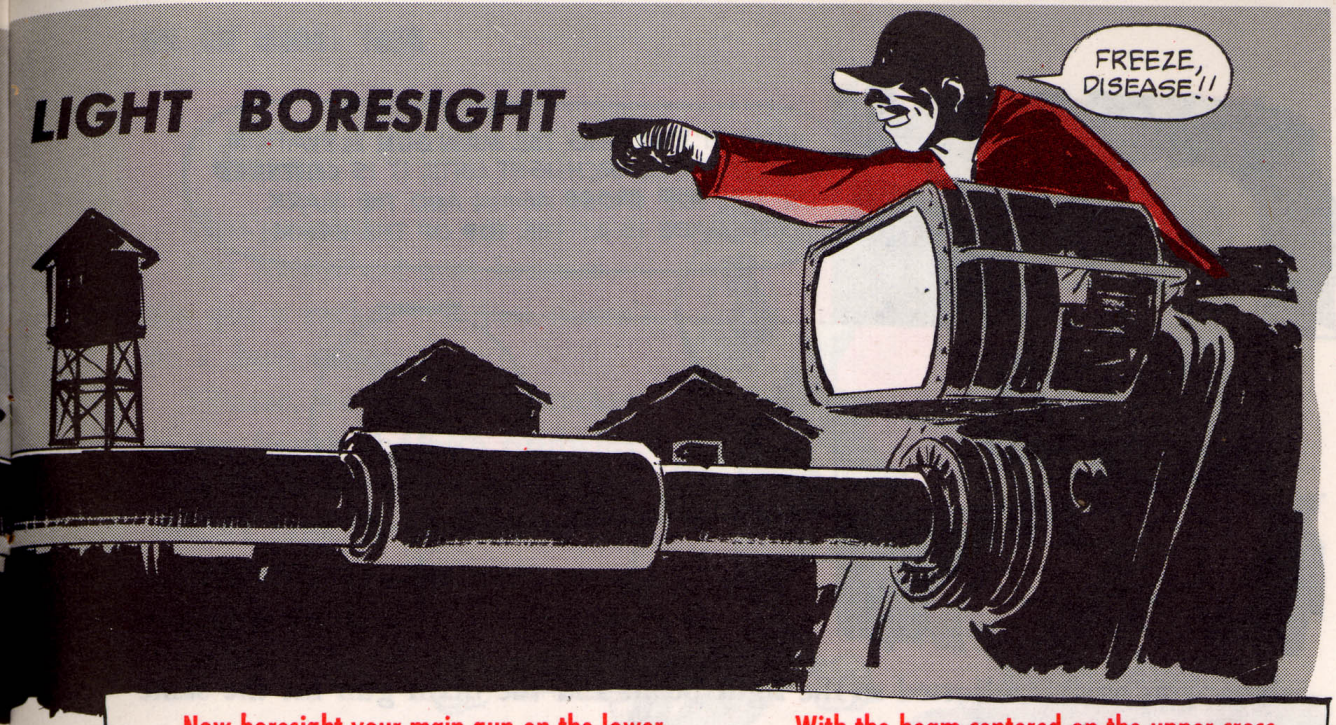
(When you do this you are naturally careful not to look direct into the light because its 75 million candlepower could burn your eyeballs.)

Now, with the light still on, you elevate the gun 5 mils. Like you already know, this is done by moving the elevation quadrant to plus 5 mils and then manually elevating the gun until the bubble is centered.

This plus 5 mils gun elevation will naturally throw your searchlight beam 5 mils higher so the mark you made to show the top of the searchlight beam is now about in the center.

MORE

LIGHT BORESIGHT



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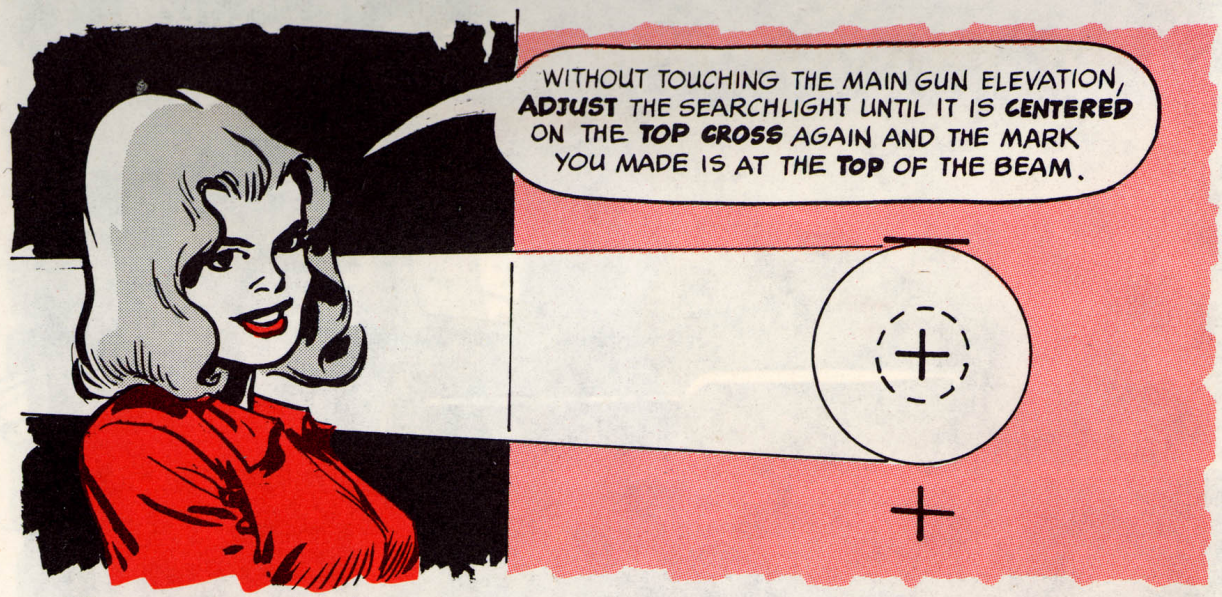
PS MORE



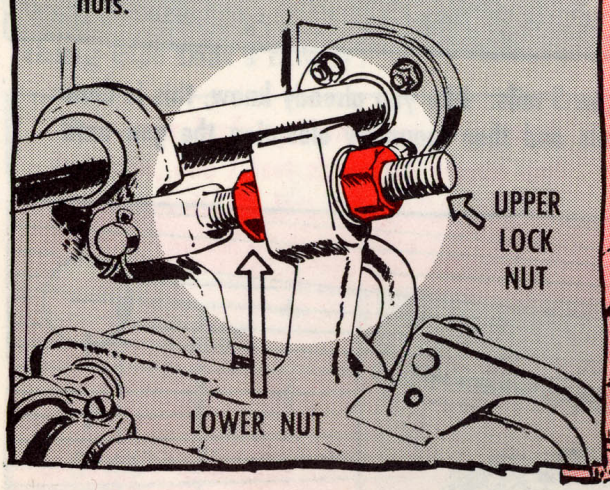
Now you have it adjusted so the light beam and the main gun hit the same target at 1200 meters.

In case you don't know how to unlock the searchlight so you can adjust it, see para 10b on page 7 of TM 5-6230-204-15 (Feb 65).

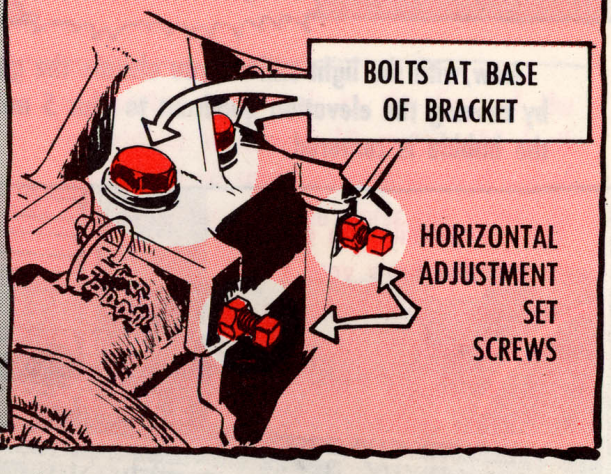
If you have the xenon light you need this TM, so yell for it loud and clear. (In case you've got a sore throat, use a DA Form 17 to order it from the St. Louis pubs center.)

Until you get it, you can adjust the light by these numbers:

1. Loosen the 2 lock nuts on the vertical adjustment screw. Tightening the upper nut elevates the light and tightening the lower nut depresses the light. When you have the adjustment right, tighten both nuts.



2. If you must also change the light's deflection (which sometimes happens), loosen the 2 bolts at the base of the bracket and then work the 2 horizontal adjustment setscrews. When you have it right, tighten everything back again.



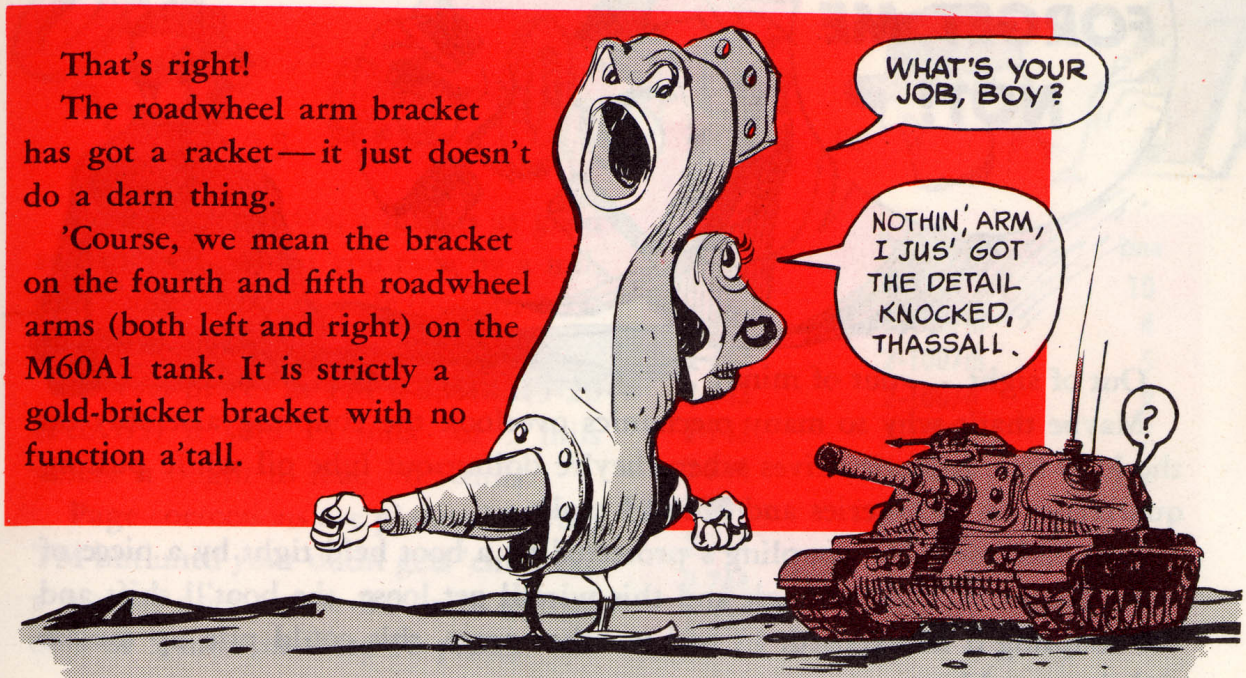
Remember, the light (which weighs about 230 pounds) must be hand held when the hitch handles are released so get plenty of strong-backed buddies to help you.

THE BRACKET HAS GOT A RACKET

That's right!

The roadwheel arm bracket has got a racket—it just doesn't do a darn thing.

'Course, we mean the bracket on the fourth and fifth roadwheel arms (both left and right) on the M60A1 tank. It is strictly a gold-bricker bracket with no function a'tall.



The brackets on the sixth roadwheel arms, both left and right, are plenty hard-working, tho, because a shock absorber ties to them and a volute spring uses them for a bumper.

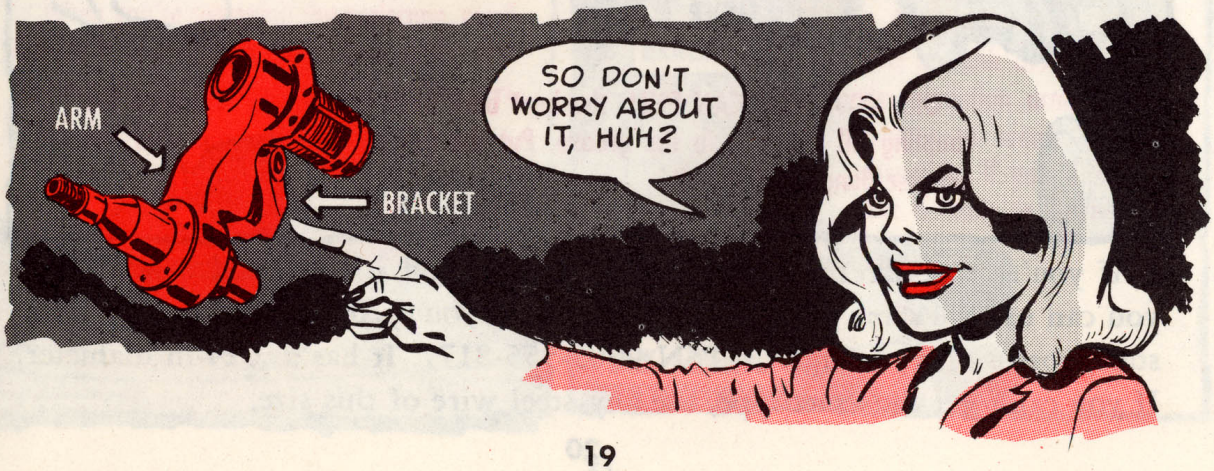
Howcum the brackets are on the fourth and fifth roadwheel arms if they don't do any work?

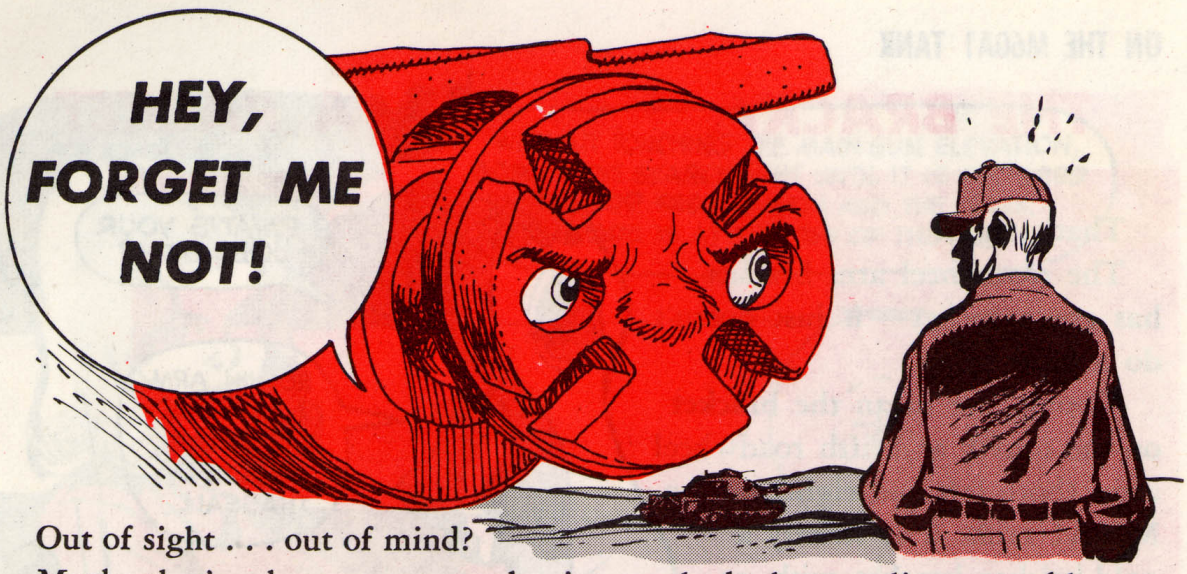
Well, it's like this: The fourth, fifth and sixth roadwheel arms are all alike . . .

FSN 2530-871-2860 (Part No. 10905985-1)—
the three left side arms.

FSN 2530-871-2859 (Part No. 10905985-2)—
the three right side arms.

It was just simpler to make only two types for the six roadwheel arms even though the brackets on the fourth and fifth arms are freeloaders . . .





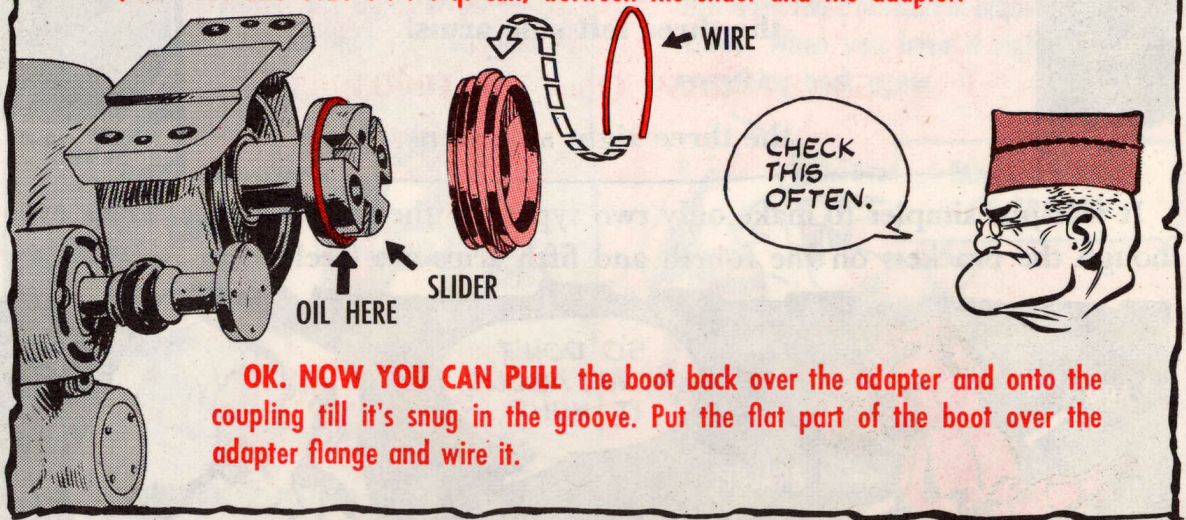
Out of sight . . . out of mind?

Maybe that's why so many mechanics overlook the coupling assembly on the M10-type ballistic drives when they're doling out lube oil while pulling quarterlies on M60-series and M48A3 tanks.

Too bad, too! The coupling's protected by a boot held tight by a piece of wire. Neglect it long enough and this wire'll get loose, the boot'll shift and the coupling'll be exposed. In bad weather areas, this could pile up mucho sighting troubles.

So, strictly a friendly tip: Doublecheck this trouble spot right now. Then add it to your quarterly checklist. It may not need lubing every three months, but it is sure worth checking.

NO BIG SWEAT LUBING IT. Just take a pair of pliers and remove the wire that holds the boot in place. Push the boot over the slider onto the adapter that's attached to it. Then put a few drops of instrument lube oil (FSN 9150-223-4129 . . . 1-qt can) between the slider and the adapter.



OK. NOW YOU CAN PULL the boot back over the adapter and onto the coupling till it's snug in the groove. Put the flat part of the boot over the adapter flange and wire it.

If you're real careful taking the wire off—and it's in good condition—you can use the same piece over again. But, if you need a new piece, use Wire, steel, corrosion resisting . . . FSN 9505-555-8177. It has a .024-in diameter. If you can't get the exact type, use any steel wire of this size.

M60 TANK MIL CHANGES

Like the man says, a miss is as good as a mile . . . but if you miss by a mil, that's too much by a mile for your M60 tank fire control system.

Several places in TM 9-2350-215-20 (Feb 65) it says 3 mils or 5 mils where it ought to read 0.5 mils.

Page corrections are planned for the TM but until your outfit gets 'em make a mental note to use 0.5 mil instead of 3 or 5 mils in these 10 places.

Page	Paragraph	Line
2-736	2-999	10
2-743	2-1007m	4
2-743	2-1007m	5
2-743	2-1007o	2
2-743	2-1007o	7
2-744	2-1008f	8
2-744	2-1008f	10
2-744	2-1008h	4
2-744	2-1008h	11
2-745	2-1009d	4

M36 PERISCOPE CABLE CUTUP

Sure, it's OK to be a cutup when you're with the boys . . . but not when you're removing the M36 IR periscope from your M60-series tank.

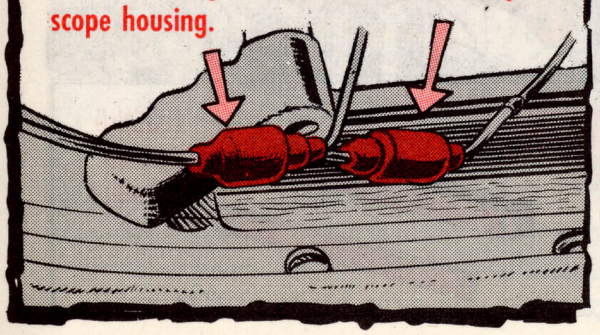
You'll rip the cables unless you disconnect them like it says on pages 3-149 and 3-150 of TM 9-2350-215-10 (Feb 65).

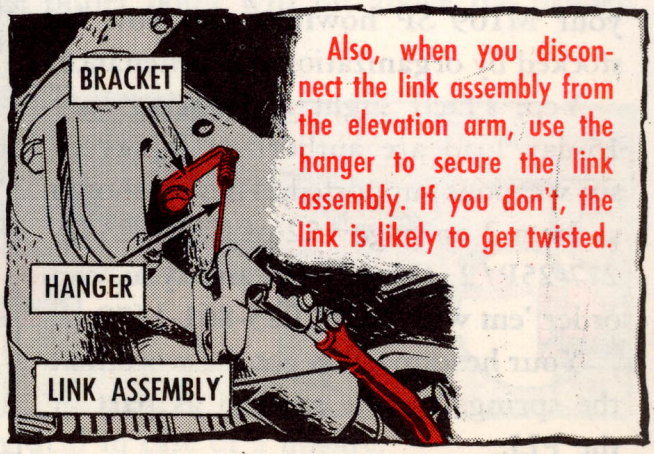
A light coating of silicone lubricant makes the rubber connectors easier to work. You can get this with FSN 5970-224-5277 in the two-ounce tube or in the eight-ounce tube with FSN 5970-159-1598. Like you already know, you never use GAA on rubber connectors.

In future tanks you may have a quick disconnect mounted on the cupola wall where it'll be easy to see.

For now, though, you'll have to do it the other way.

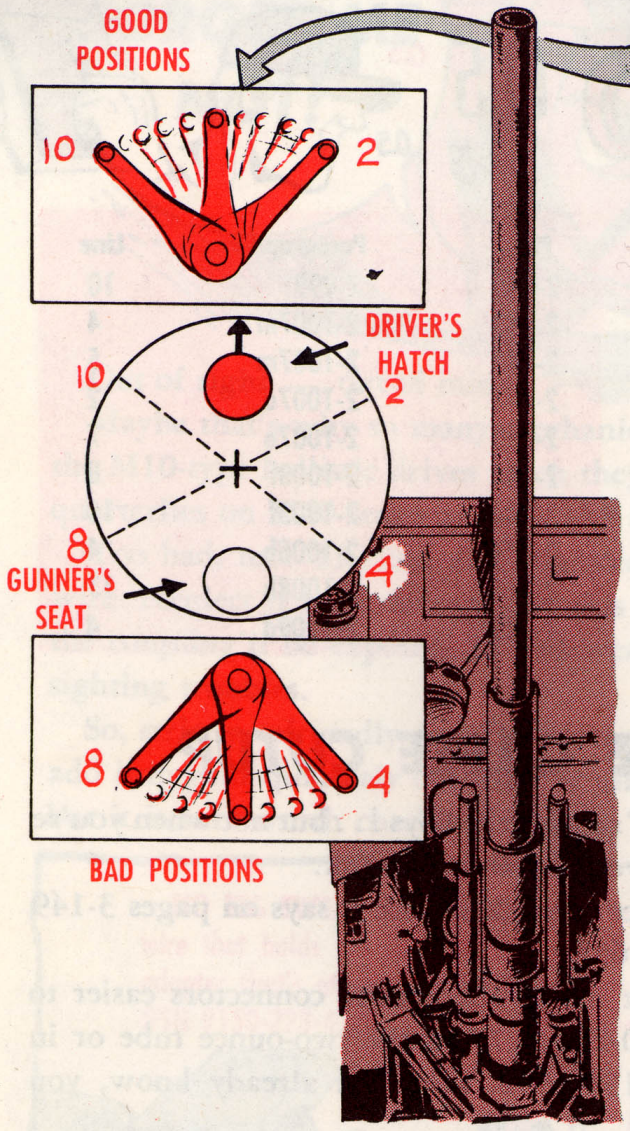
When you're removing the periscope, reach behind it and disconnect the two cables that connect the light source control to the periscope housing.

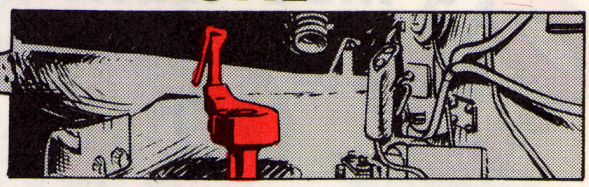




Also, when you disconnect the link assembly from the elevation arm, use the hanger to secure the link assembly. If you don't, the link is likely to get twisted.

'SCOPE SAFETY ZONE





Here's a practice you'd be smart to make second nature when you're exercising the elevation mechanism on your M107 or M110 SP weapon.

Before you do another cotton-pickin' thing, first make sure you turn the turret manual traverse gear handcrank to a spot where it won't be in the way of the elbow part of the M115 panoramic telescope when the tube gets near maximum elevation. Otherwise both the elbow and the M137 telescope mount will get hurt.

The best spot to park the handcrank before elevating is somewhere between the 10 and 2 o'clock positions, using the driver's hatch as your 12 o'clock guide point.

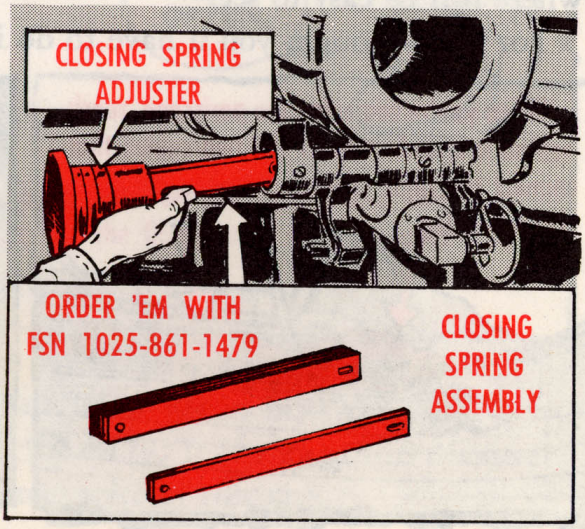
What you want to avoid mostest is leaving the handcrank and the scope lined up in about the same position, say, between the 8 and 4 o'clock mark.

M109 HOWITZER HOOPLA

The breechlock closing spring for your M109 SP howitzer can now be stocked by organizational maintenance.

Yep, s'fact! Eight leaf springs per 15-day load are authorized for every six weapons supported. They're shown as Item 2 on page 152 of TM 9-2350-217-25P/2 (Nov 64), and you can order 'em with FSN 1025-861-1479.

Your headquarters got the word that the springs can be stocked as part of the PLL.



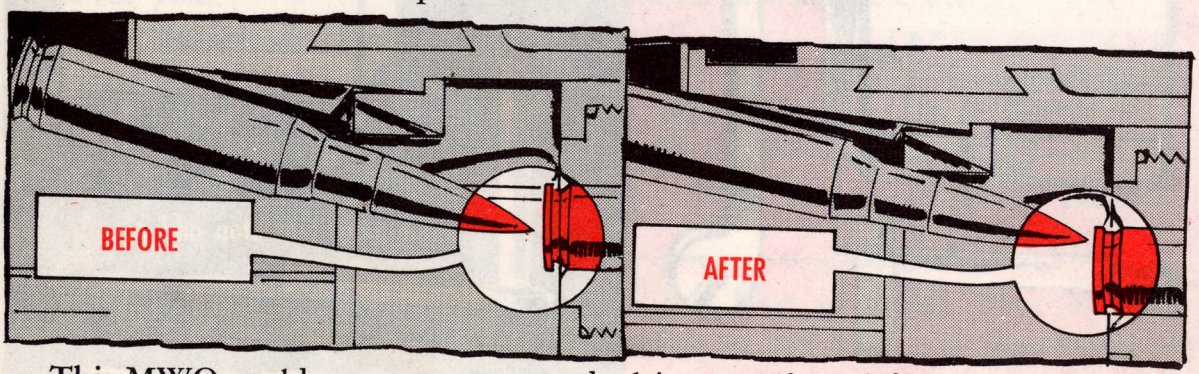
"R" — LIKE IN INSURANCE

Doublecheck the serial number on the left side of your weapon's receiver — there, right below the rear sight. If the number is under 77605, it should have an R after it.

If it doesn't have an R, quick like a bunny get your direct support guys to give your gun a dose of MWO 9-1000-232-30/1 (30 Jul 65).

They'll ream out the bullet ramp inside the receiver and change the angle about five degrees — just enough to keep the point of a round being stripped from hitting the primer of the previous round, in case the previous round didn't get extracted and is still in there.

After the angle's been changed, the bullet point will hit above the primer where it won't cause an explosion.



This MWO could save you a messy deal in case of a misfire.

M2 MACHINE GUN

CHECK YOUR SPARE BOLT

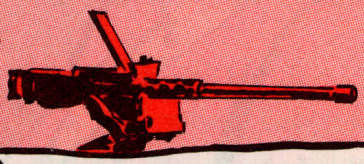
Make darned sure the spare bolt for your flexible or cupola-mounted M2 50-cal machine gun will work in your weapon!

Sounds silly? Not a wee bit—and here are some reasons why:

1. There're still some old-type parts around that don't mix with the new parts for the spare bolt and barrel extension.

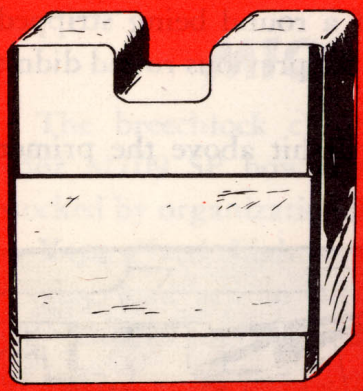
2. The flex-type gun will work about as well with the old-type parts as it will with the new-type parts, as long as you have all old ones or all new ones and they're in good shape.

3. But the cupola-mounted machine gun must have all new parts or it'll be sluggish.

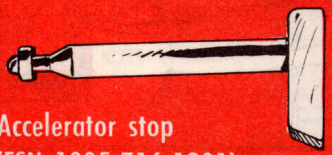


In a nutshell, the spare bolt for the cupola-mounted weapon must have the new-type . . .

Barrel extension with New-type cutaway breech lock (FSN 1005-716-1302).



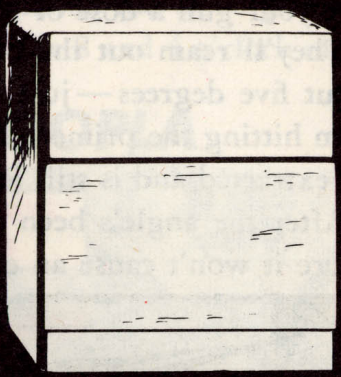
Accelerator stop lock (FSN 1005-716-1300)



Accelerator stop (FSN 1005-716-1301)

On the other hand, the flexible M2 must either have all these new-type parts or all old-type parts . . .

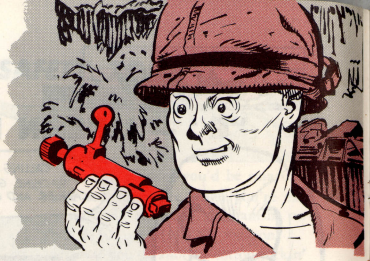
Solid-type breech lock.



One-piece sear stop and pin

M2 MACHINE GUN

CHECK YOUR SPARE BOLT



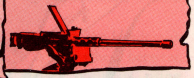
Make darned sure the spare bolt for your flexible or cupola-mounted M2 50-cal machine gun will work in your weapon!

Sounds silly? Not a wee bit—and here are some reasons why:

1. There're still some old-type parts around that don't mix with the new parts for the spare bolt and barrel extension.

2. The flex-type gun will work about as well with the old-type parts as it will with the new-type parts, as long as you have all old ones or all new ones and they're in good shape.

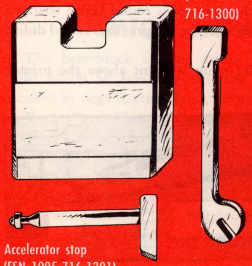
3. But the cupola-mounted machine gun must have all new parts or it'll be sluggish.



In a nutshell, the spare bolt for the cupola-mounted weapon must have the new-type . . .

Barrel extension with New-type cutaway breech lock (FSN 1005-716-1302).

Accelerator stop lock (FSN 1005-716-1300)



Accelerator stop (FSN 1005-716-1301)

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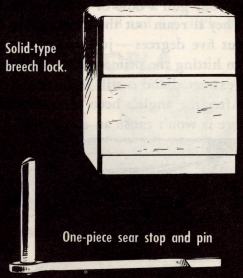
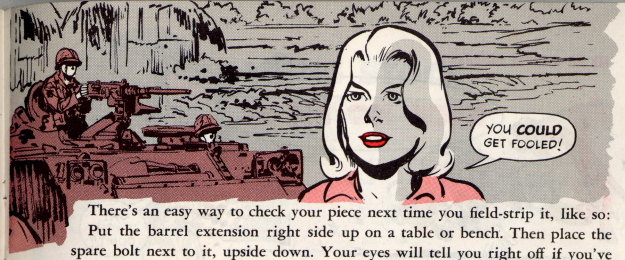
Solid-type breech lock.

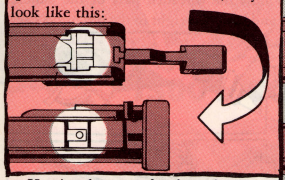


One-piece sear stop and pin

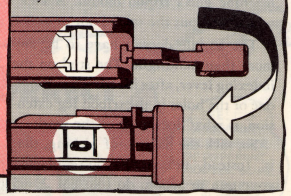


There's an easy way to check your piece next time you field-strip it, like so: Put the barrel extension right side up on a table or bench. Then place the spare bolt next to it, upside down. Your eyes will tell you right off if you've got matched parts.

If you have the new parts in both the spare bolt and barrel extension, they'll look like this:



If you have the old parts in both, they'll look like this:

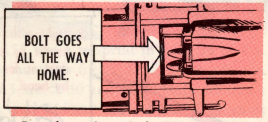


Here's what you do about it:

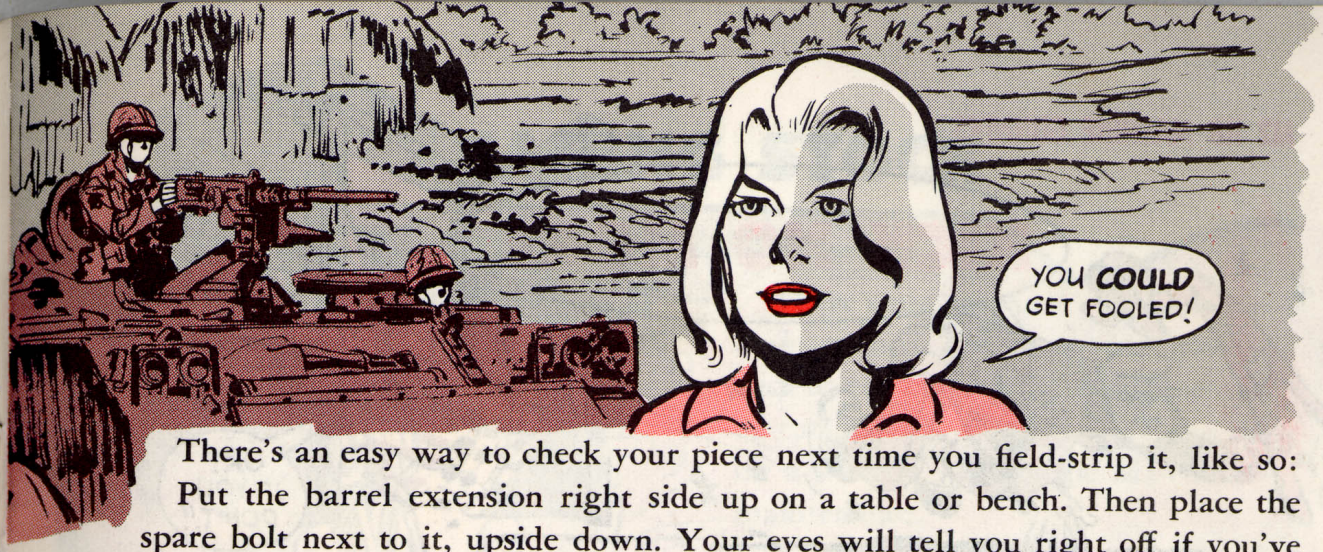
If the cupola-mounted weapon has any old-type parts at all in its spare bolt or barrel extension, replace 'em quick with new parts. You can get the accelerator stop lock and accelerator stop through TM 9-1005-213-12P (Jan 64) w/Change 1, but your direct support guys will have to change the breech lock for you.

If the flexible machine gun has all old-type parts, make sure they're not badly worn or chipped or bent or otherwise damaged. If the parts are OK, go on using 'em. But if the weapon has any mixture of old and new-type parts, you'll have to replace the old-type parts with new-types. The old-types just aren't made any more.

As a final check-out, assemble the spare bolt and barrel extension and see how they work together. The bolt should go all the way forward with no sweat. If it won't, and lacks about ¾-in of hitting home, you'll know you've still got a mixture of old and new parts . . . which means going through the whole deal again.



Just bear in mind: Your M2's no better in the long run than its spare bolt.



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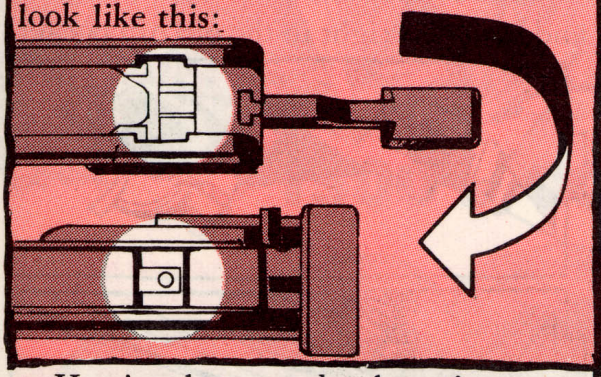
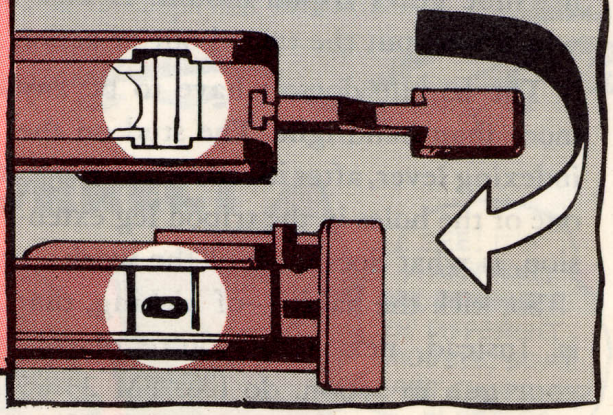


If you have the old parts in both, they'll look like this:



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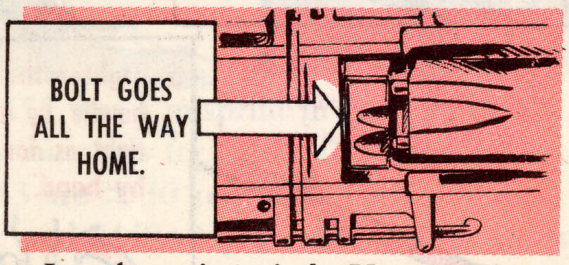


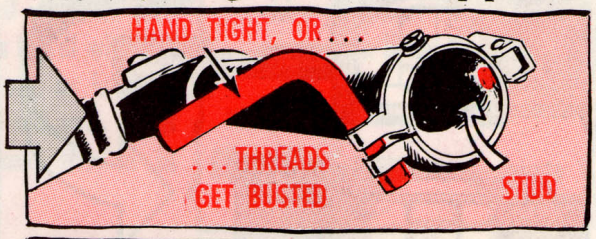
Just bear in mind: Your M2's no better in the long run than its spare bolt.

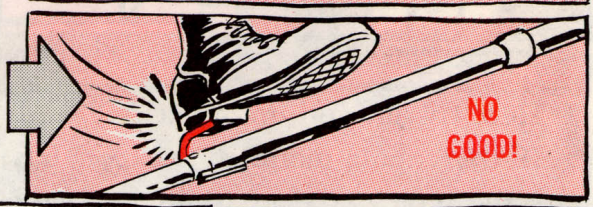
Ask any pussycat: Kicking is a lousy habit.

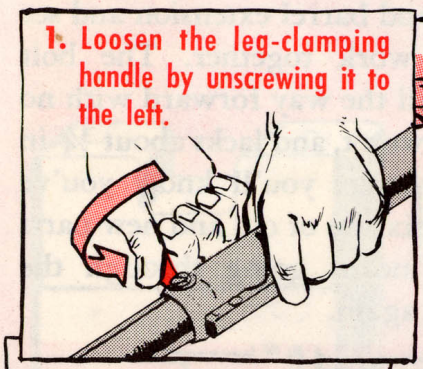
Especially if you make a practice of using your heel to tighten the leg-clamping handle when you're firming up a telescoping leg on your M2 HB machine gun's tripod mount. A kick'll bust the threaded part of the handle, which will put the tripod out of action and boot you right in the old hip pocket.

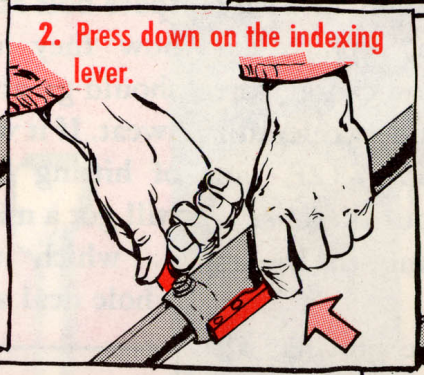
The handle doesn't have to be any more than handtight. The stud on the indexing lever, after it's shoved through one of the holes in the tripod leg extension, is what does most of the work.

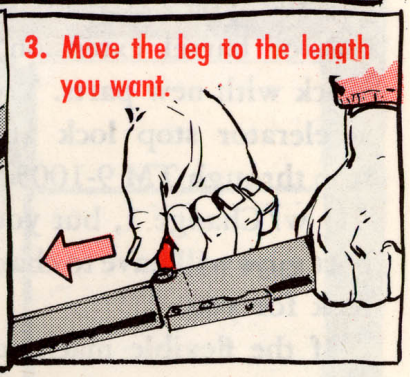
So, kick the habit—of kicking, that is. Instead, next time you're placing your gun in action, do like FM 23-65 (Dec 55) tells you in para 33a(2):

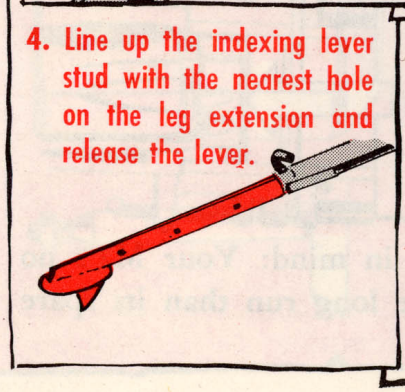












TAKING STOCK

There's maintenance . . . and there's maintenance. But no matter how you slice it, you can't call sanding, scraping or carving the wooden stock assembly on a weapon — like the M14 rifle — maintenance.

You clean the stock assembly with a dry cloth . . . and rub raw linseed oil into the wood. The oil does two things — it keeps the wood from getting dry and it keeps out moisture.

1500's CORRECT

Yep, you're right, Bright Eyes. That 155 was a misprint in Item 34 of TM 9-2350-208-ESC/2 (3 Jun 64). The magic numbers for calibrating rangefinders on all M48-series tanks except the M48A3 are ± 30 and 1500. Only difference is, the rangefinders on the M48, M48A1 and M48A2 are calibrated in yards while the one on the M48A2C is calibrated in meters. On the M48A3, however, the rangefinder's also calibrated in meters, but the magic numbers are ± 30 and 1200.

A selected list of recent publications of interest to Organizational Maintenance Personnel. This is a list compiled from recent Adjutant Generals Distribution Center Bulletins. For complete details see DA Pam 310-4 with latest changes.

TECHNICAL MANUALS

TM 1-1H-23C-2, C5, Sep, OH-23.
TM 5-3805-205-25P, Oct, Scraper, earth moving towed, Curtiss-Wright CWT-18-M.
TM 5-4310-250-15, Nov, Compressor, Roty, Air, DED, 250 CFM 100 PSI; Davey M250RPV.
TM 5-4320-214-20P, Oct, Pump, Cent, GED, 1500 GPM, Chain Belt 6LWG.
TM 5-4320-228-15, Sep, Pump, Cent, GED, 170 GPM, Barnes 52109-2.
TM 5-6115-223-20P, Oct, Generator set, dsl, Cummins NHRS 6-G.
TM 9-1055-217-20, Nov, 2.75-In Rocket Launcher XM3.
TM 9-1100-300-20P, Nov, OP/ORG Maint, Sergeant.
TM 9-1220-221-20/1, Nov, M18 gun direction computer.
TM 9-1410-375-12P/1, Oct, Pershing.
TM 9-1430-250-15P/2/1, Oct, Nike-Herc, Nike-Herc (Imp).
TM 9-1430-250-15P/3/1, Oct, Nike-Herc, Nike-Herc (Imp).
TM 9-1430-250-15P/4/1, Oct, Nike-Herc.
TM 9-1430-250-15P/13/2, Oct, Nike-Herc (Imp).
TM 9-1430-501-15P/1, Oct, Hawk.
TM 9-1450-376-15P/2, Oct, Pershing.
TM 9-2320-213-20, Oct, Truck, Platform: ½-Ton, M274, M274A1, M274A2.
TM 9-2330-272-14, C1, Oct, Semi-trailer, Tank Fuel 5,000 Gal, M131A4, M131A4C.
TM 9-4935-376-12P/1, Nov, Pershing.
TM 9-4935-377-15P/2, Oct, Pershing.
TM 9-4935-378-15P/1, Sep, Pershing.
TM 9-4935-503-15P/1, Oct, Hawk.
TM 9-4935-507-15P/2, Oct, Hawk.
TM 9-4935-508-15P/1, Oct, Hawk.
TM 9-4935-508-15P/2, Oct, Hawk.
TM 9-6920-461-12, C1, Nov, GML-M22.
TM 10-500-12, Oct, Airdrop of Supplies, Equip, Rigging Loads.
TM 10-500-67, Nov, Rigging of Trkd Personnel/Cargo Carriers.
TM 10-500-86, Nov, Airdrop, Rigging SS-11.
TM 10-1670-208-20, Nov, Platform, Airdrop, Modular, Dual-Rail Sys, Types I, II.
TM 10-1670-215-23, Oct, Parachute, cargo, 100-Ft Dia, Types G-11, G-11A.
TM 10-1670-222-23, Nov, Parachute, cargo, 64-Ft Dia, Type C-12C; Type C-12D.
TM 10-1670-226-23P, Nov, Parachute, cargo, 38-Ft Dia, Type RCAT.
TM 10-1670-238-20, Nov, Containers, Airdrop: Types A-7A, A-21, A-22.
TM 11-5815-238-12, Dec, Teletype-writer Sets AN/GGC-3, AN/GGC-3A, TT-76/GGC, TT-76A/GGC, TT-76B/GGC, TT-76C/GGC.
TM 11-5820-398-12, Nov, AN/PRC-25 radio set.
TM 11-5820-526-15, C1, Dec, AN/TRC-90A, radio terminal set.
TM 11-6625-639-12, Oct, AN/FPA-15, AN/FPA-16, Power supply test set.
TM 55-405-3, C6, Nov, Maint of Aircraft Systems.
TM 55-1510-204-10, Oct, OV-1.
TM 55-1510-206-20P, Nov, CV-2.
TM 55-1520-203-10, C1, Nov, CH-37.
TM 55-1520-204-10, C1, Jan, OH-13.
TM 55-1520-206-10, Oct, OH-23.
TM 55-1520-206-20, Oct, OH-23.
TM 55-1520-209-10, C13, Nov, CH-47.
TM 55-1520-209-10, C14, Dec, CH-47.
TM 55-1520-209-10, C15, Jan, CH-47.

MODIFICATION WORK ORDERS

MWO 5-6100-200-30/1, Dec, URGENT Generator Sets, GED, 3KW, using Wisconsin Engine MAENLD: Install newly designed connecting rod.
MWO 55-1510-204-34/71, Nov, OV-1. (Normal)
MWO 55-1520-204-34/27, Dec, OH-13. (Normal)
MWO 55-1520-206-34/18, Dec, OH-23. (Normal)
MWO 55-1520-209-30/23, Dec, CH-47. (Normal)
MWO 55-1520-209-34/105, Dec, CH-47. (Normal)
MWO 55-1520-210-30/4, Dec, UH-1. (Normal)
MWO 55-1520-210-34/10, Dec, UH-1. (Normal)
MWO 55-1520-211-20/5, C2, Dec, UH-1. (Normal)
MWO 55-1520-211-30/1, Dec, UH-1. (Normal)
MWO 55-1610-211-40/1, C2, Dec, CV-2. (Normal)

2028?

See Page 63

MORE TRAFFIC LIGHT PUBS

Here's the latest list of available Equipment Serviceability Criteria TM's. Check it out—if you need any—get the word to your Pubs section for prompt action.

TM 9-2320-209-ESC/8, Oct, Truck, Cargo: M35A1, M35A2.
TM 11-296-ESC, Oct, AN/PRC-6 radio set.
TM 11-5820-401-ESC/1, Oct, AN/VRC-12 radio set.
TM 11-5820-401-ESC/2, Oct, AN/VRC-46 radio set.
TM 11-5820-401-ESC/4, Nov, AN/VRC-47 radio set.
TM 55-1510-203-ESC, Oct, U-6.

REPRINTS

Listed here are older publications that are freshly available as a result of reprinting Order copies on DA Form 17.

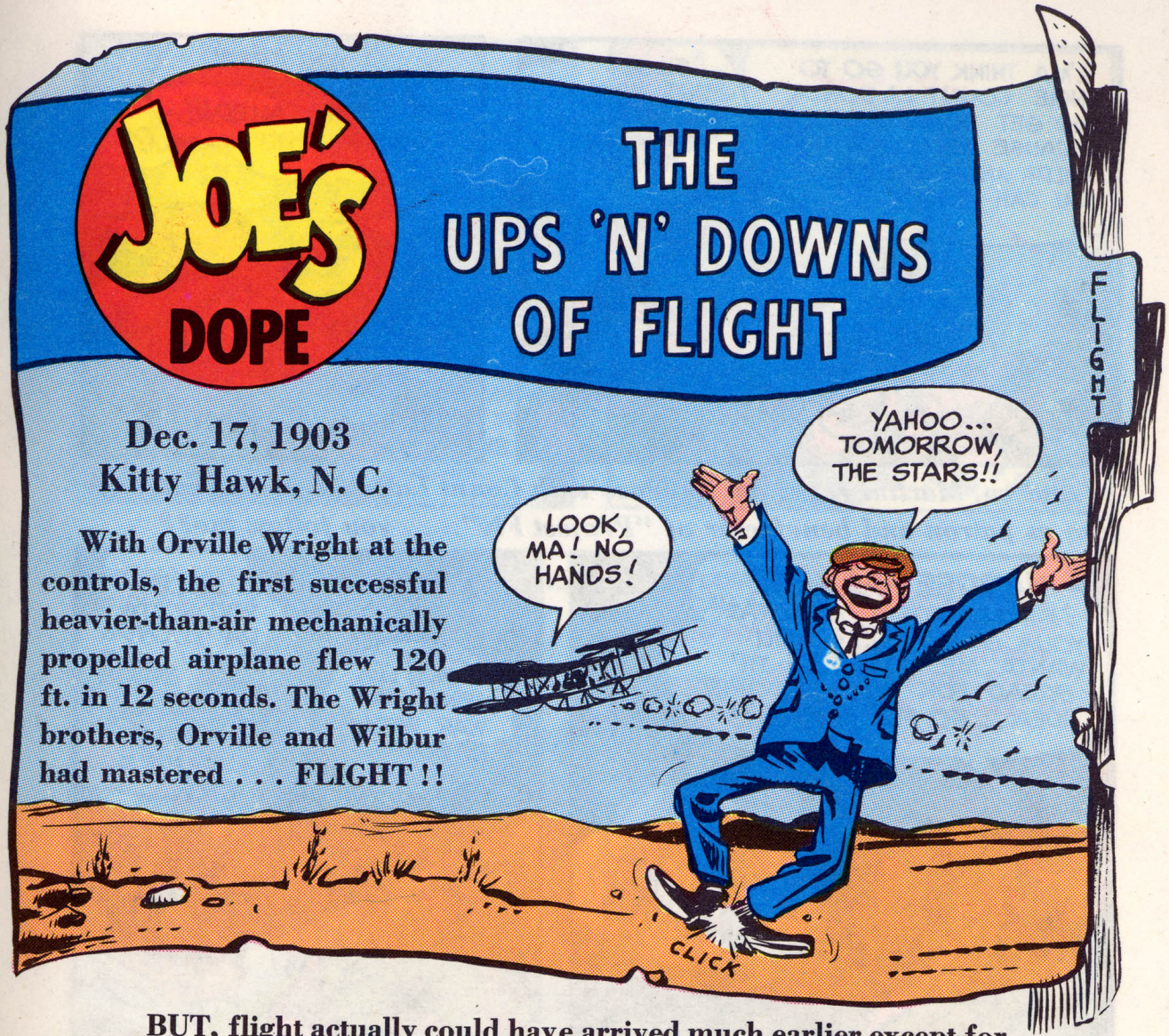
TM 1-1H-23C-2, Nov 64, OH-23.
TM 3-4240-224-20P, May 62, Breathing Apparatus, Compressed Air, ABC-M15A1.
TM 5-270, May 64, Cableways, Tramways, Susp Bridges.
TM 5-2805-203-14, Aug 63, MIL-STD Eng, 6 HP.
TM 5-2805-206-24P, Jul 63, Engine, GED, Mil-Std, 1A08-1, 1A08-2, 1½ HP; 2A016-1, 2A016-2, 3 HP.
TM 5-3695-207-15, Apr 64, Chain Saw.
TM 5-3805-208-20P, Jul 63, Grader, road, CAT 12.
TM 5-3815-201-15P, Dec 61, Bucket dragline, Drake-Williams.
TM 5-4310-216-25P, Oct 63, Compressor, recip air, 5 CFM, 175 PSI, Champion Pneumatic OEG-34-60-ENG, OEH 34-30-ENG.
TM 5-4310-252-15, Dec 63, Compressor, recip air, elect driven, 2.7 CFM, 80 PSI, Johnson Service Co. 110-LAG.
TM 5-6115-235-20, Dec 63, Gen set, diesel engine: 45 KW, AC, Consolidated Diesel 4060.
TM 5-6115-261-20, Jul 62, Generator set, DED, 15 KW, Jeta MD-151815-WA.
TM 5-6115-327-25P, Aug 62, Generator set, GED, 3 KW, DC, 28V Hollingsworth JHGV3A.
TM 5-9125-1, C1, Jun 56, #2 Couse Light Set.
TM 9-1005-247-12, C1, Jan 64, M2 Armament Subsystem.
TM 9-1240-278-20P, Jun 60, Optical Bore Sight, M45 (T151E).
TM 9-1400-461-20, Feb 65, M22 Armament Subsystem.
TM 9-1430-512-12-2, Jul 64, Hawk check procedures AN/TPQ-21 (XO-1).
TM 9-1440-500-20, Apr 60, Hawk launcher XM78.
TM 9-6049, Jul 54, M92 telescope mount.
TM 9-6109, Nov 53, Plotting Boards, M5 & M5A2, etc.
TM 9-6650-203-12P, Feb 59, Tools, Parts, etc. for M7 Binoculars.
TM 9-6920-312-12P, Jun 64, Sergeant manfunction setter (MX-6367 & MX-6366).
TM 10-500-3, May 65, Rigging supplies, equip for CV-2B.
TM 11-283, Jul 54, AN/VRC-6( ) radio set.
TM 11-1175, May 54, AN/UPM-6( ) radar set.
TM 11-1247B, May 56, TS-1470/UP test set.
TM 11-2265, Dec 55, TO-97( )/FGJ-2 Multiplexer; TD-98( )/FGR-3 demultiplexer; AM-911/FG amplifier.
TM 11-2312A, Jan 55, PH-545A/PF camera.
TM 11-2316, Sep 55, FM-1(1), photo film cleaning machine.
TM 11-5111, Sep 56, PP-1097( )/G power supply.
TM 11-5805-286-25P, Apr 64, AN/MCC-3 telephone repeater.
TM 11-5820-498-10, Nov 62, AN/VRC-53, AN/GRC-125 radio sets; OA-3633/GRC amp.
TM 11-5825-202-ESC, Sep 58, AN/GRN-6 radio beacon set.
TM 11-5825-211-ESC, Jun 64, AN/GRN-11 radio beacon set.
TM 11-5965-206-15P, Jan 63, H-91( )/U, H-144( )/U, H-210/G, headset-microphone.
TM 11-5985-229-12P, Aug 64, AB-86/GRA-4 mast.
TM 11-5965-224-15P, Aug 63, H-60/PT, H-165/U handsets.
TM 11-5965-249-15P, Nov 61, H-63/U handset-microphone.
TM 11-6115-205-10P, Jan 60, PE-210( ) power unit.

JOE'S DOPE

THE UPS 'N' DOWNS OF FLIGHT

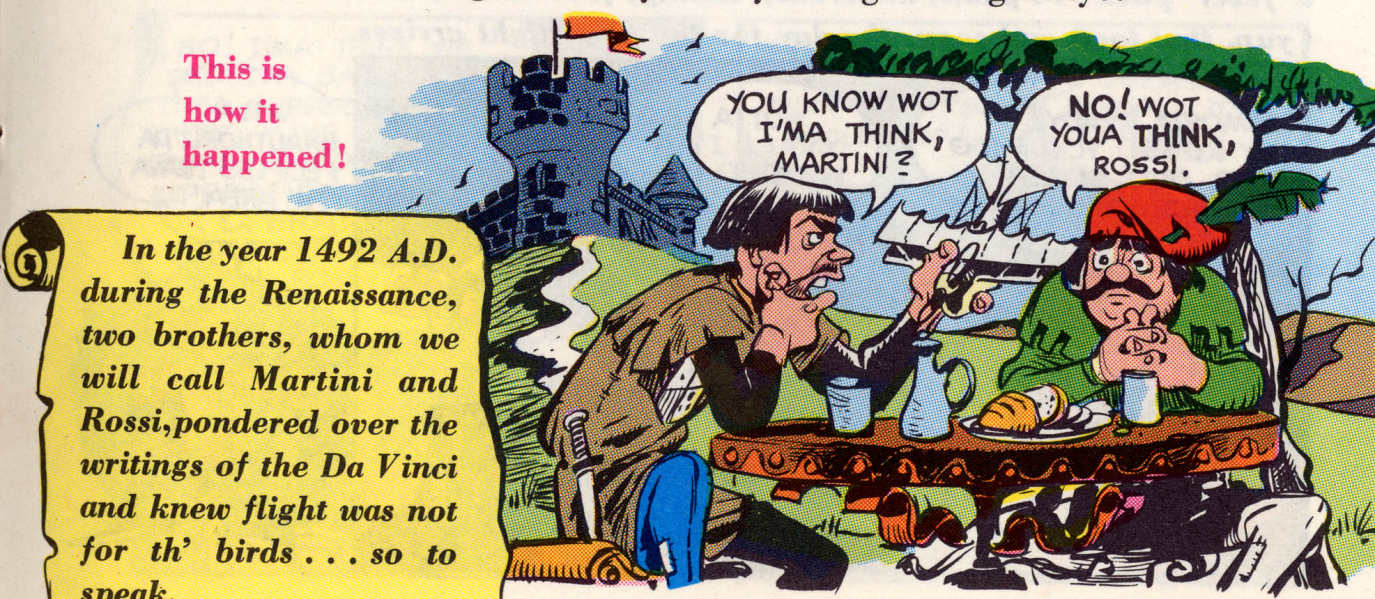
Dec. 17, 1903
Kitty Hawk, N. C.

With Orville Wright at the controls, the first successful heavier-than-air mechanically propelled airplane flew 120 ft. in 12 seconds. The Wright brothers, Orville and Wilbur had mastered . . . FLIGHT!!

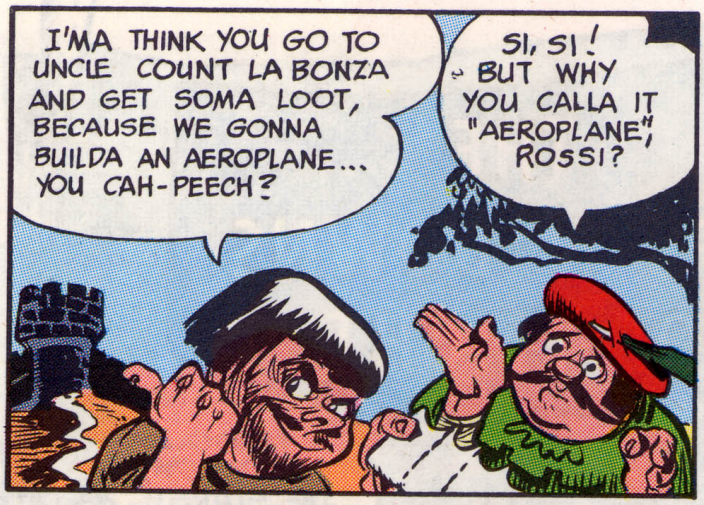


BUT, flight actually could have arrived much earlier except for a very familiar failure in maintenance on the part of a couple of air types who thought the only enemy of flight was gravity!!

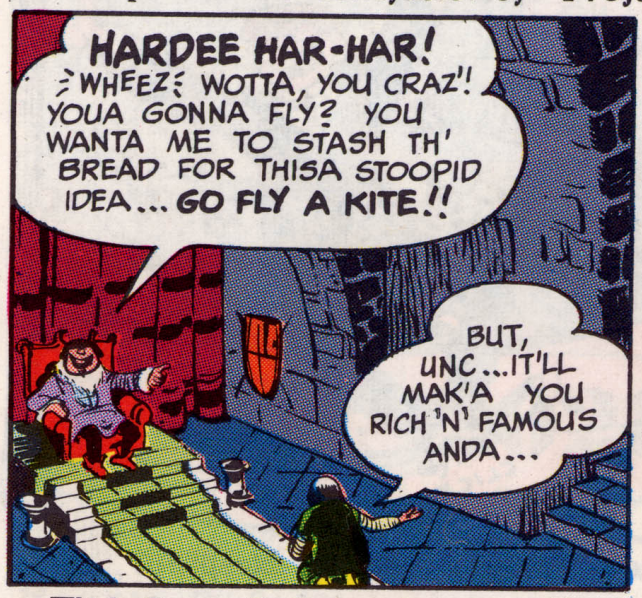
This is how it happened!



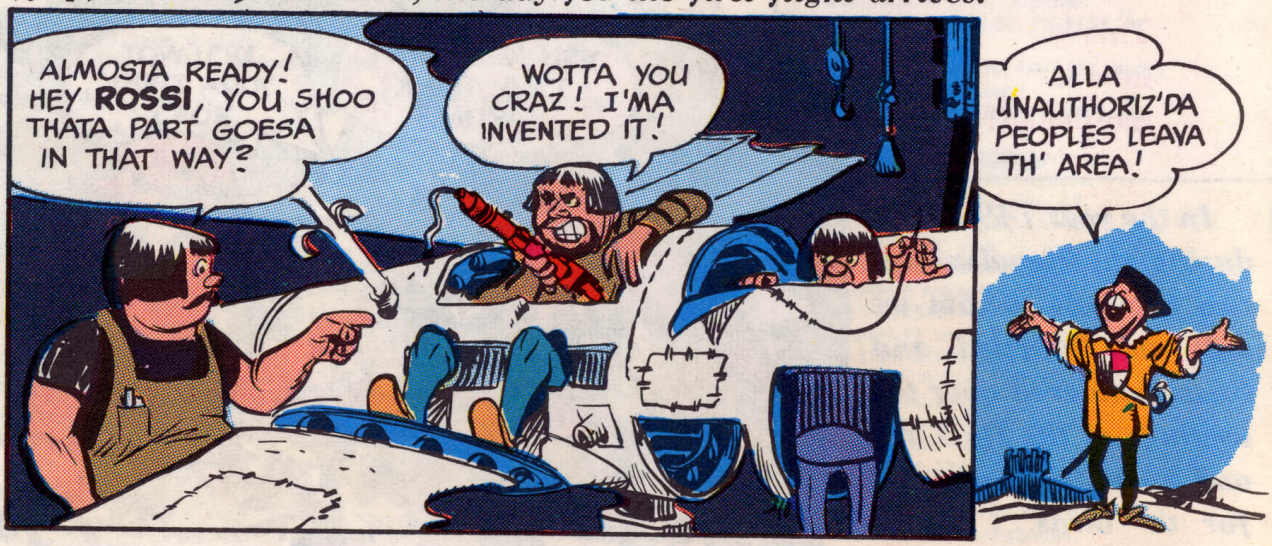
In the year 1492 A.D. during the Renaissance, two brothers, whom we will call Martini and Rossi, pondered over the writings of the Da Vinci and knew flight was not for th' birds . . . so to speak.

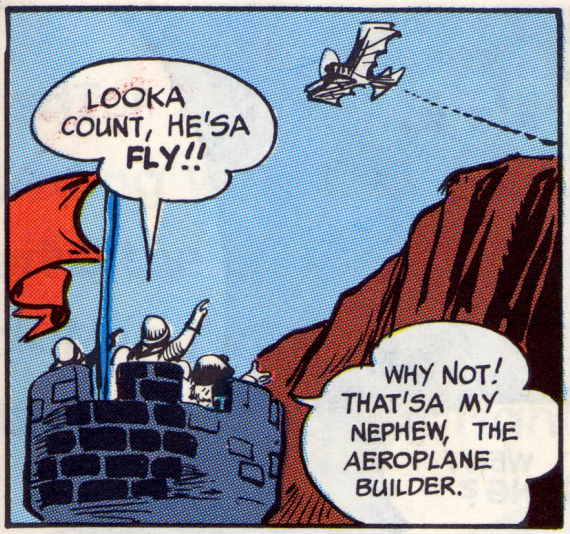


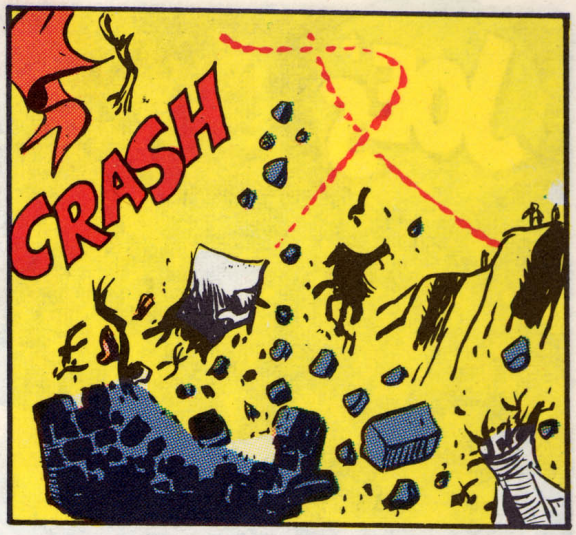
And so, Martini seeks an audience with Count LaBonza in order to have him as patron and benefactor of "Project Fly" . . . you follow me??



With Count LaBonza booting th' tab, work begins and soon mounts to a fever pitch . . . plans, materials, testing, fabrication, wind tunnel tests (yup, that too) and soon, the day for the first flight arrives.



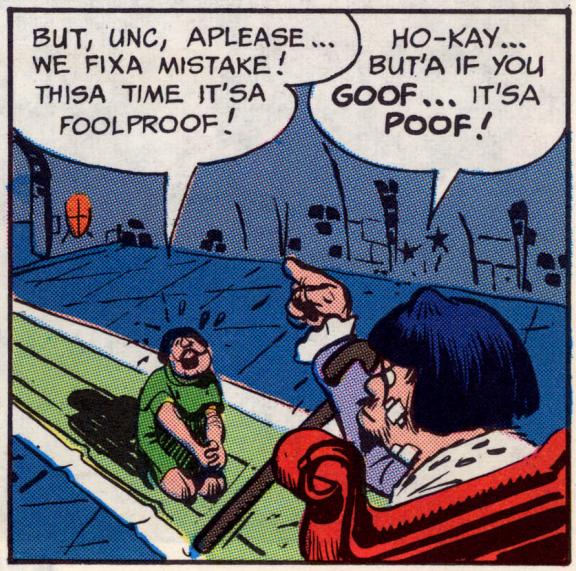

LOOKA COUNT, HE'SA FLY!!
WHY NOT! THAT'SA MY NEPHEW, THE AEROPLANE BUILDER.


CRASH

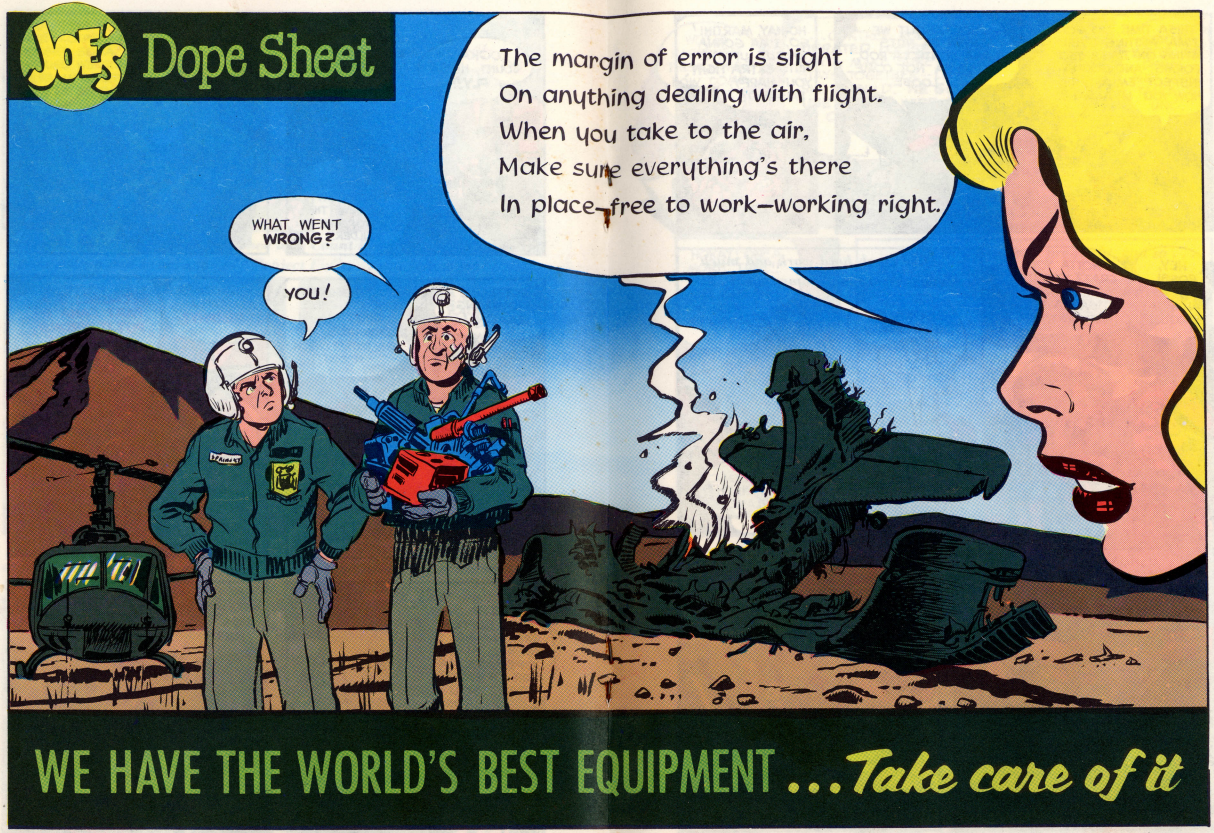
WOTTA WE DID WRONG? MARTINI!
WE DID A MURPHY... WE PUTA DRIVE SHAFT INA BACKWARDS, AND WE DIDN'T CHECK IT OUT!

HOW COME YOU CALLA IT MURPHY?
BECAUSE, IF A PART CANA BE PUT IT WRONG, SOMEBODY EESA SHURE TO DO IT!

SO! I'MA THINK WE SHOULDA SAY, IFA IT'SA SUPPOSE TO BE THERE, MAKE SURE IT'SA RIGHT... ALSO MAK'A AN OPERATIONAL CHECK OR OPERATE THE PART YOU WORKA ON, ROSSI!
GOOD! WRITA THAT ADOWN... WE START AGAINA.


BUT, UNC, APLEASE... WE FIXA MISTAKE! THISA TIME IT'SA FOOLPROOF!
HO-KAY... BUT'A IF YOU GOOF... IT'SA POOF!

IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BUL

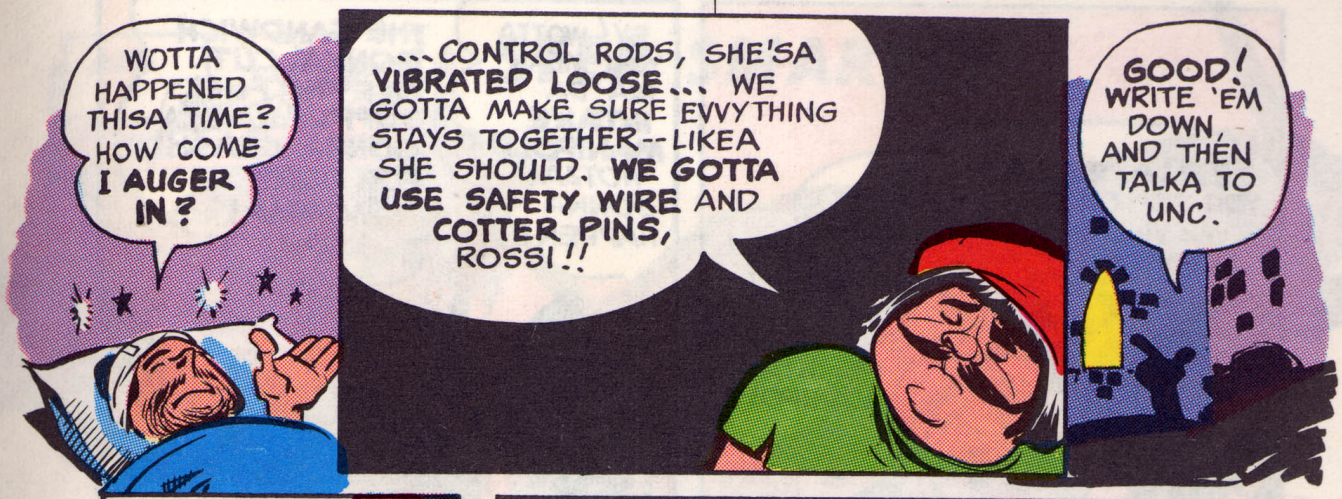


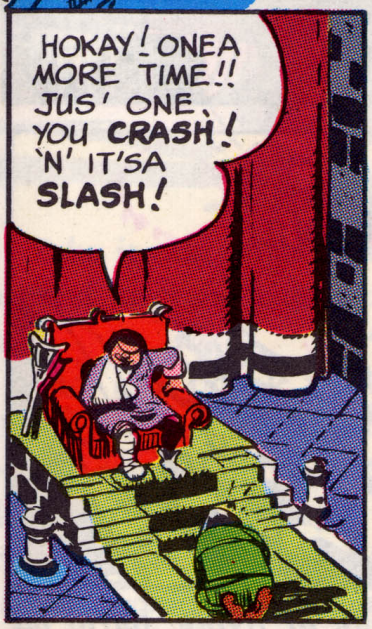
IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.

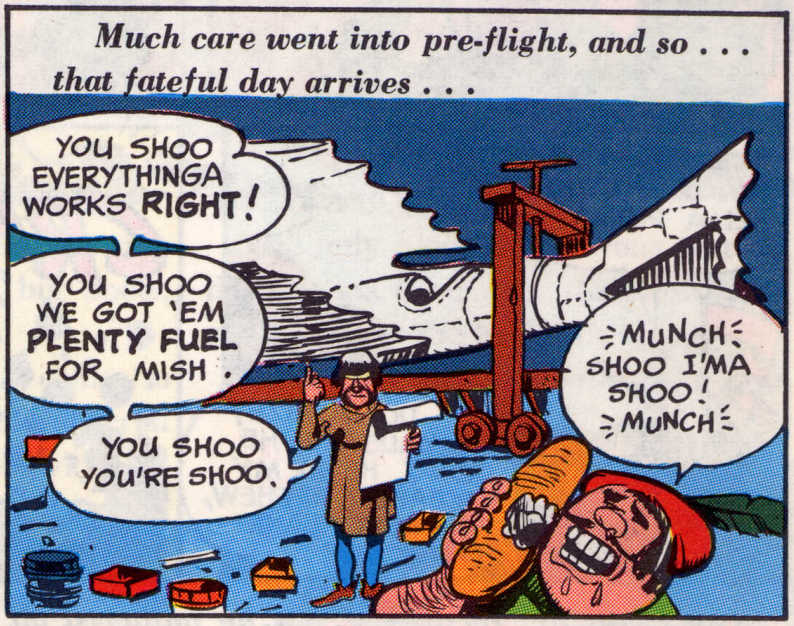
QUIPMENT ... *Take care of it*

LLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.

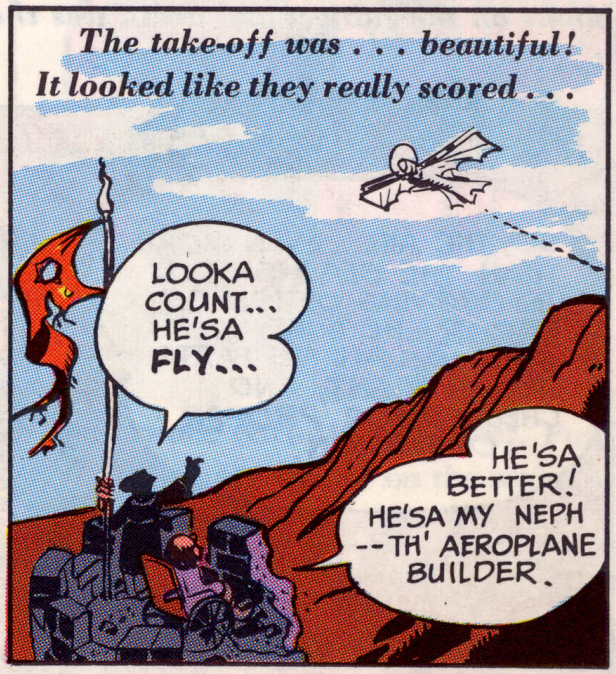
THISA TIME, NO GOOF! I'MA WRITING EVERY ATING ON TM 38-750 FORMS, AND GONNA INSPECT 'EM AFTER. HOW YOU LIKA DAT?
HOW ABOUT WE TIGHTEN DA NUTS ONNA CONTROLA ROD, SO HE'SA NOT COME LOOSE.
HO-KAY, MARTINI! SO, I'MA GONNA TORQUE UP THE NUTS EXTRA TIGHT! YOU HAPPY, PAISANO?
HEY, ROSSI, WHY YOU CALLA DAT TORQUE?
WOTTA YOU CRAZ? F'CAUSE THAT'SA WOT IT'SA CALLED, THAT'SA WHY!
After much hard work and much money, "test time" comes again . . .
LOOKA OP INA D'SKY! HE'SA FLY!
WHY SHOO! THAT'SA MY NEPH! THE AEROPLANE BUILDER.
MAHMAMEEA, SHE'SA NO STEER RIGHT!!
CRASH

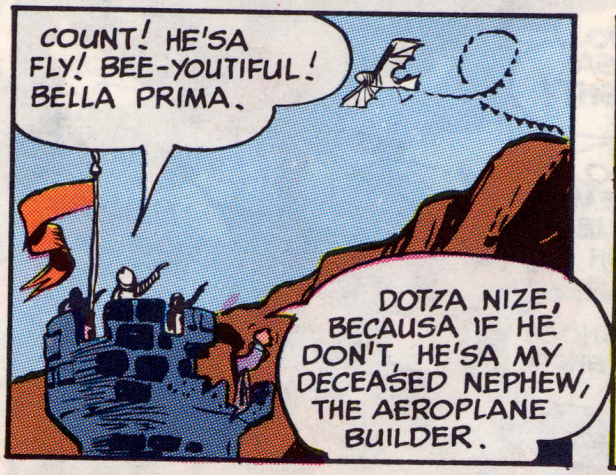

WOTTA HAPPENED THISA TIME? HOW COME I AUGER IN?
...CONTROL RODS, SHE'SA VIBRATED LOOSE... WE GOTTA MAKE SURE EVVYTHING STAYS TOGETHER--LIKEA SHE SHOULD. WE GOTTA USE SAFETY WIRE AND COTTER PINS, ROSSI!!
GOOD! WRITE 'EM DOWN, AND THEN TALKA TO UNC.

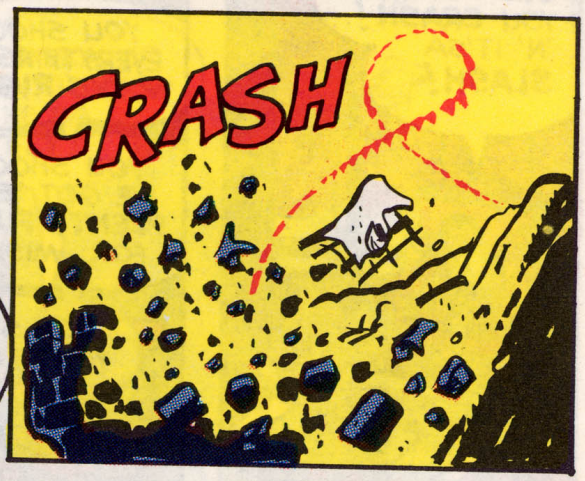

HOKAY! ONEA MORE TIME!! JUS' ONE. YOU CRASH! 'N' IT'SA SLASH!


Much care went into pre-flight, and so . . . that fateful day arrives . . .
YOU SHOO EVERYTHINGA WORKS RIGHT!
YOU SHOO WE GOT 'EM PLENTY FUEL FOR MISH.
YOU SHOO YOU'RE SHOO.
:MUNCH: SHOO I'MA SHOO! :MUNCH:

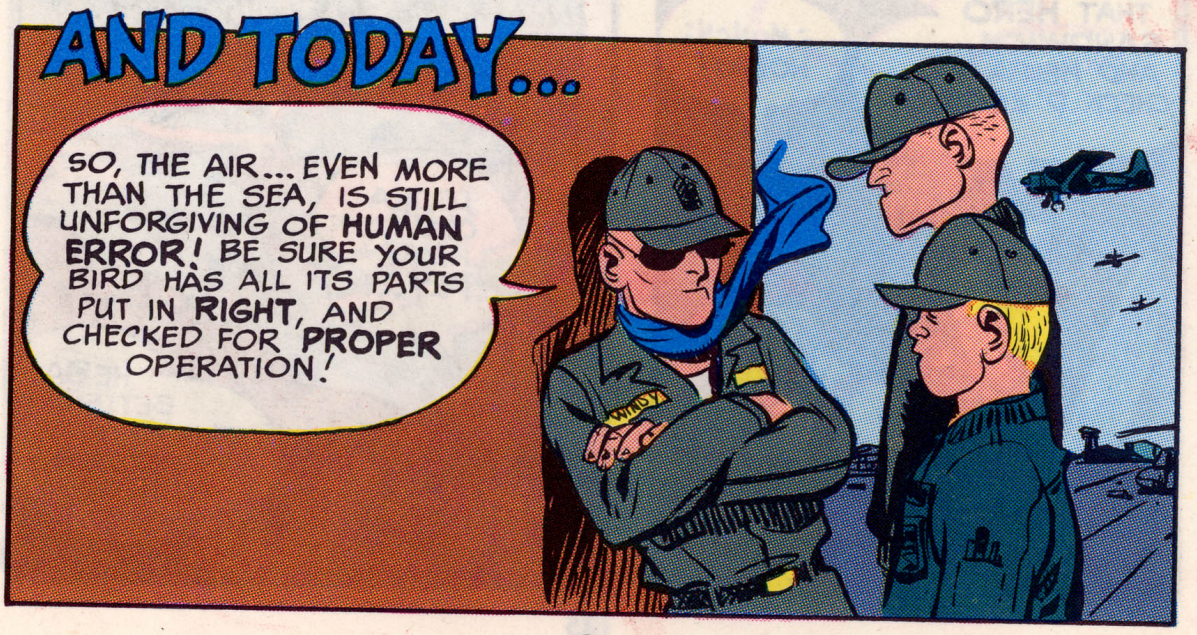
PUTA DOWN THAT HERO SANDWICH, AND HELPA ME CHECK D' 2408-13.
:MUNCH: HOKAY!


The take-off was . . . beautiful! It looked like they really scored . . .
LOOKA COUNT... HE'SA FLY...
HE'SA BETTER! HE'SA MY NEPH --TH' AEROPLANE BUILDER.

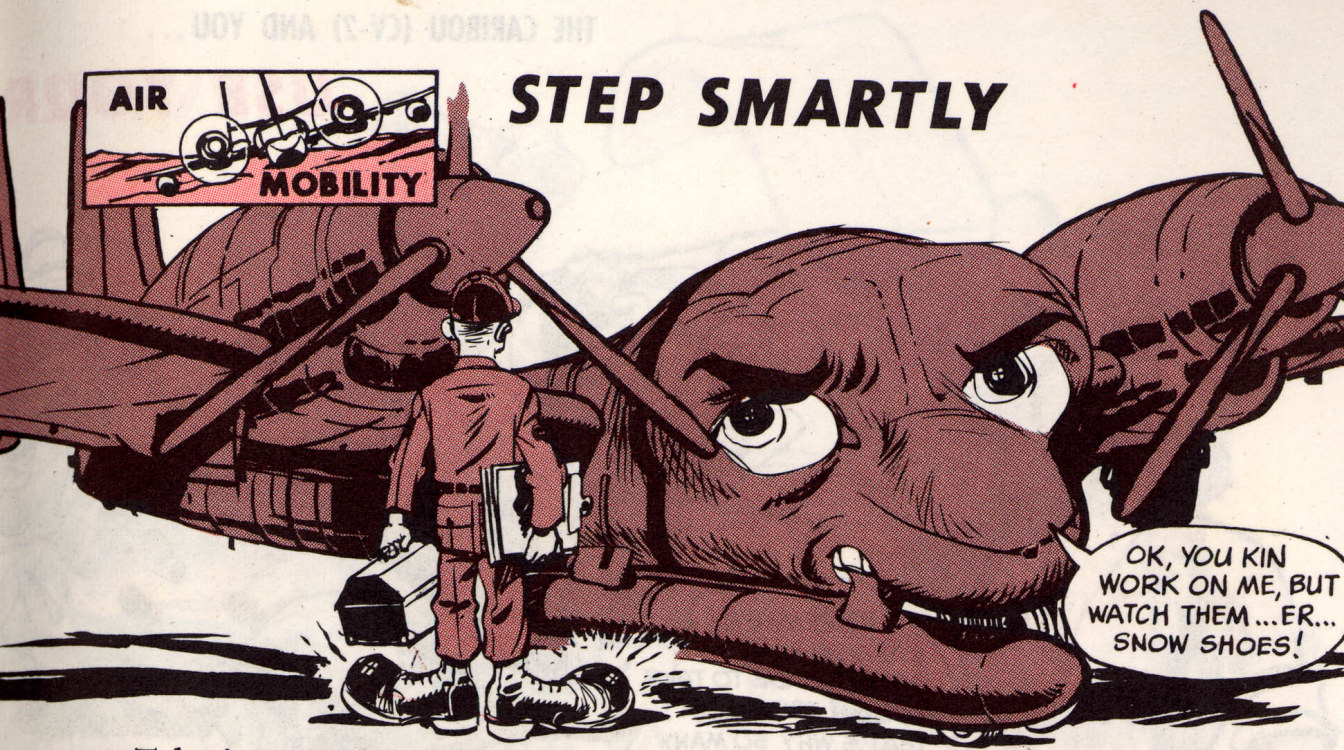




The count did recover . . . but, he outlawed all talk of flying, burnt all books on the subject and death was the penalty for EVEN thinking about it . . .

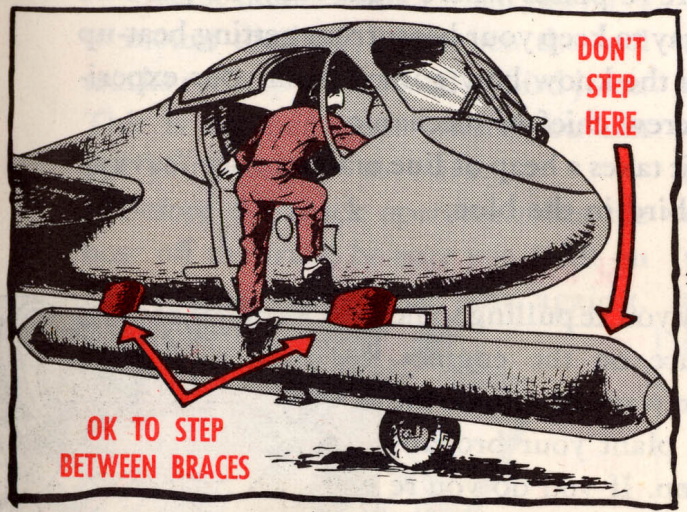


STEP SMARTLY



Take it easy when you're bouncing around aircraft with your big boots, bub.

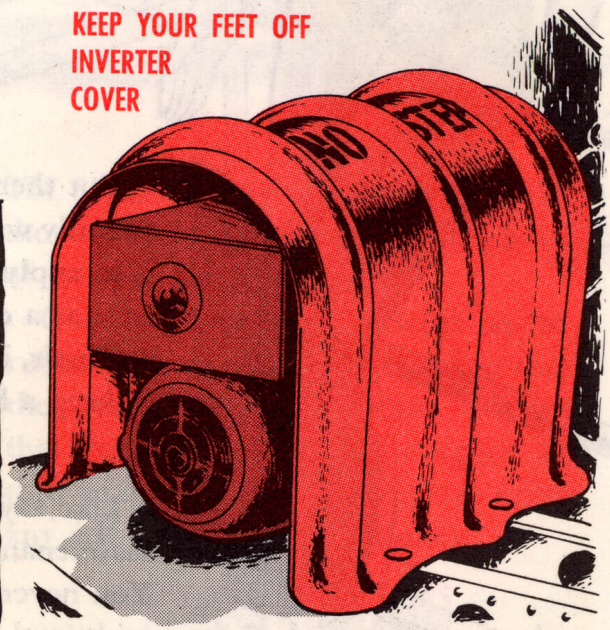
That goes double when it comes to the cigar-like SLAR (side-looking aerial radar) antenna on your Mohawk (OV-1). Usin' it as a stand while you're cleaning the windshield will damage the electronics equipment inside. You could tear the antenna loose from the braces on the belly of the aircraft.



Use the maintenance platform (FSN 1730-624-0684) that's made for high stepping.

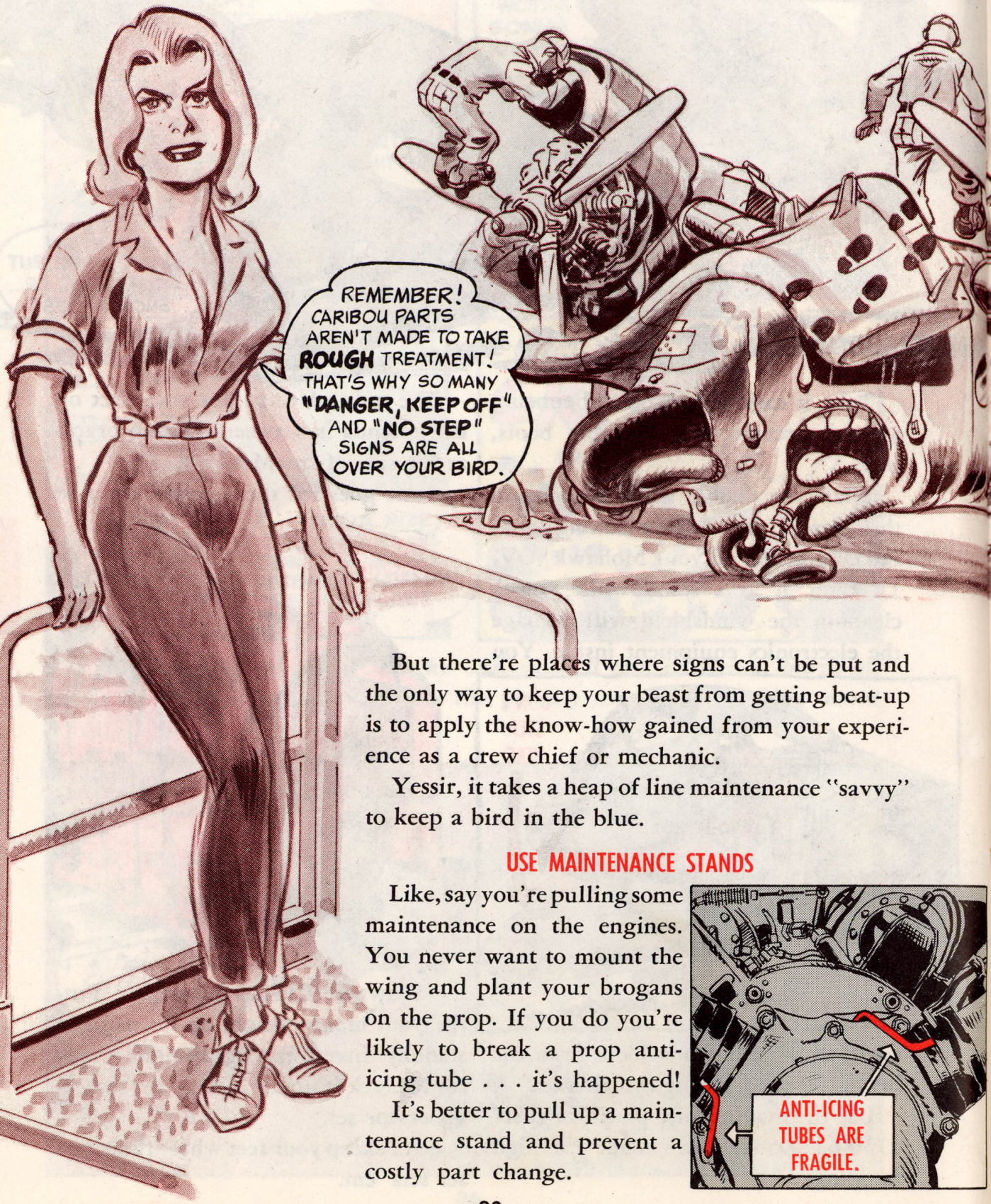
The only place to put your feet on the antenna is between the two braces at the side of the Mohawk.

Same goes for the inverter cover in the Shawnee (CH-21) helicopter. Puttin' your manly weight on the main or standby inverters' lightweight cover could crack it up or damage the motor-generator set.



So . . . keep your feet where the smart set sets 'em.

USE YOUR



But there're places where signs can't be put and the only way to keep your beast from getting beat-up is to apply the know-how gained from your experience as a crew chief or mechanic.

Yessir, it takes a heap of line maintenance "savvy" to keep a bird in the blue.

USE MAINTENANCE STANDS

Like, say you're pulling some maintenance on the engines. You never want to mount the wing and plant your brogans on the prop. If you do you're likely to break a prop anti-icing tube . . . it's happened!

It's better to pull up a maintenance stand and prevent a costly part change.

USE YOUR "SAVVY"

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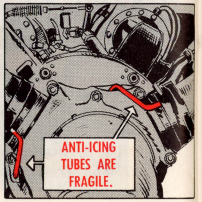
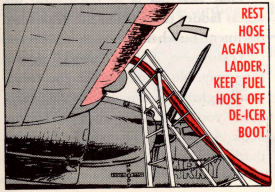


'Course there're times when you have to mount the bird, like when the fuel trucks rolls up with a load of bird juice. This is another place where you can put your "savvy" to work.

Before the truck operator takes the hose off the truck be sure you latch on to a ladder to rest the hose against.



TM 55-1510-206-20P (28 Jun 65) authorizes an airframe ladder on the basis of one per five aircraft.

One close look at the patches on the rubber de-icer boots will clue you that they really take it on the chin — when that rugged fuel hose is dragged or thrown over them. It's enough to make any self-respecting bird fume!!

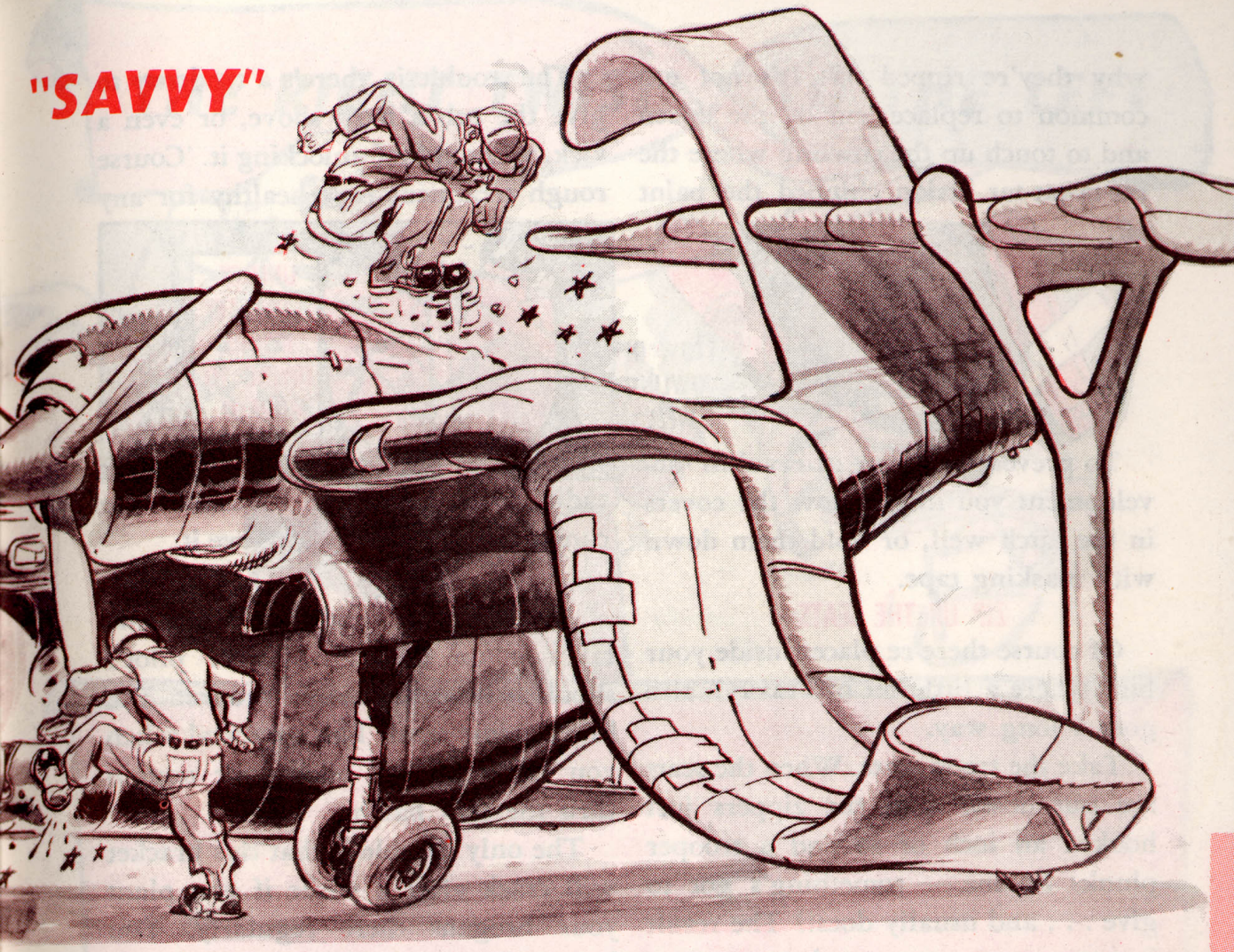
STOW THE LATCH COVERS

With the wind blowing down the strip these days comes one of the most irritatin' bits of maintenance you're likely to come across — replacing missing cowling latch covers.

Seeing's believing. When those latch covers windmill it isn't hard to figure

P/S MORE

"SAVVY"



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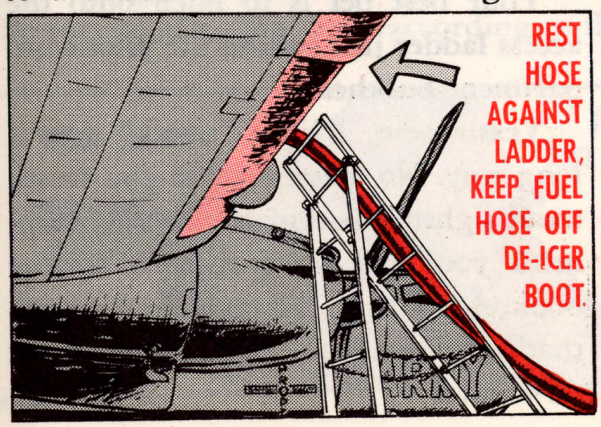

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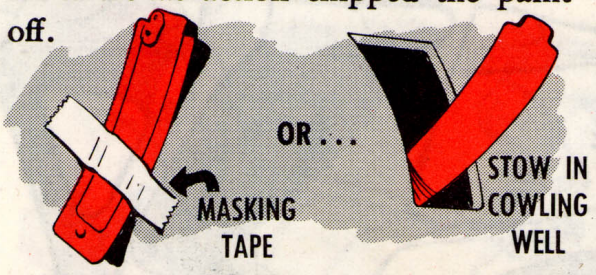
With the wind blowing down the strip these days comes one of the most irritatin' bits of maintenance you're likely to come across — replacing missing cowling latch covers.

Seeing's believing. When those latch covers windmill it isn't hard to figure

PS MORE

why they're ripped off. It's not uncommon to replace 'em by the dozen and to touch up the cowling where the rat-ta-tat-tat action chipped the paint off.



To prevent this type of revoltin' development you might stow the covers in the latch well, or hold them down with masking tape.

ZIP UP THE SEATS

Of course there're places inside your bird where a little bit of "savvy" also goes a long way.

Take the troop seats. When the seats are put down with the zippers just hooked an inch or so and a trooper plunks in one — something's got to give . . . and usually does!! The result is some extra canvas repair to put in a new zipper.

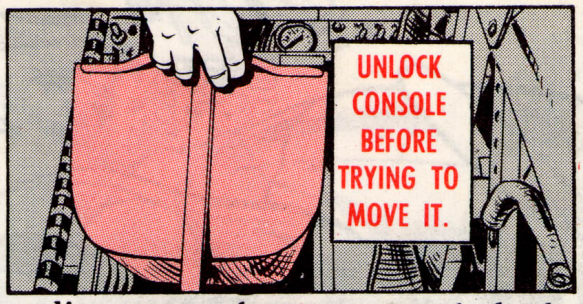
So, be sure the seats are zipped up all the way.

UN-LATCH THE TUB

You ever notice how some parts on your beast just naturally take a beating? Sure you have!

Take the sliding console that has the radio control panels in it. In flight the pilots pull the console back between them so they can use the radios. On the ground it gets pushed forward, out of the way.

The trouble is, there's a tendency to give the tub a hard shove, or even a kick, without first unlocking it. 'Course rough treatment isn't healthy for any

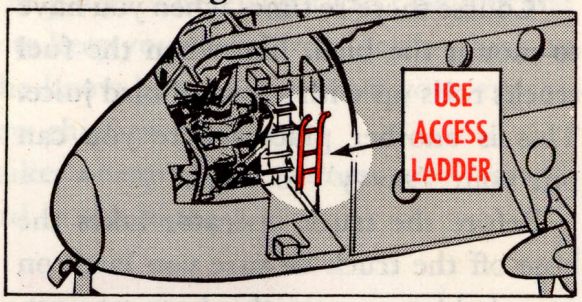


radio gear . . . be sure to unlock the console before you try to move it.

DON'T STEP HERE

Another place inside your bird that takes it on the chin is the pilot's shoulder harness retainer bracket. The bracket just seems like a natural when you climb up and stick your noggin thru the roof hatch.

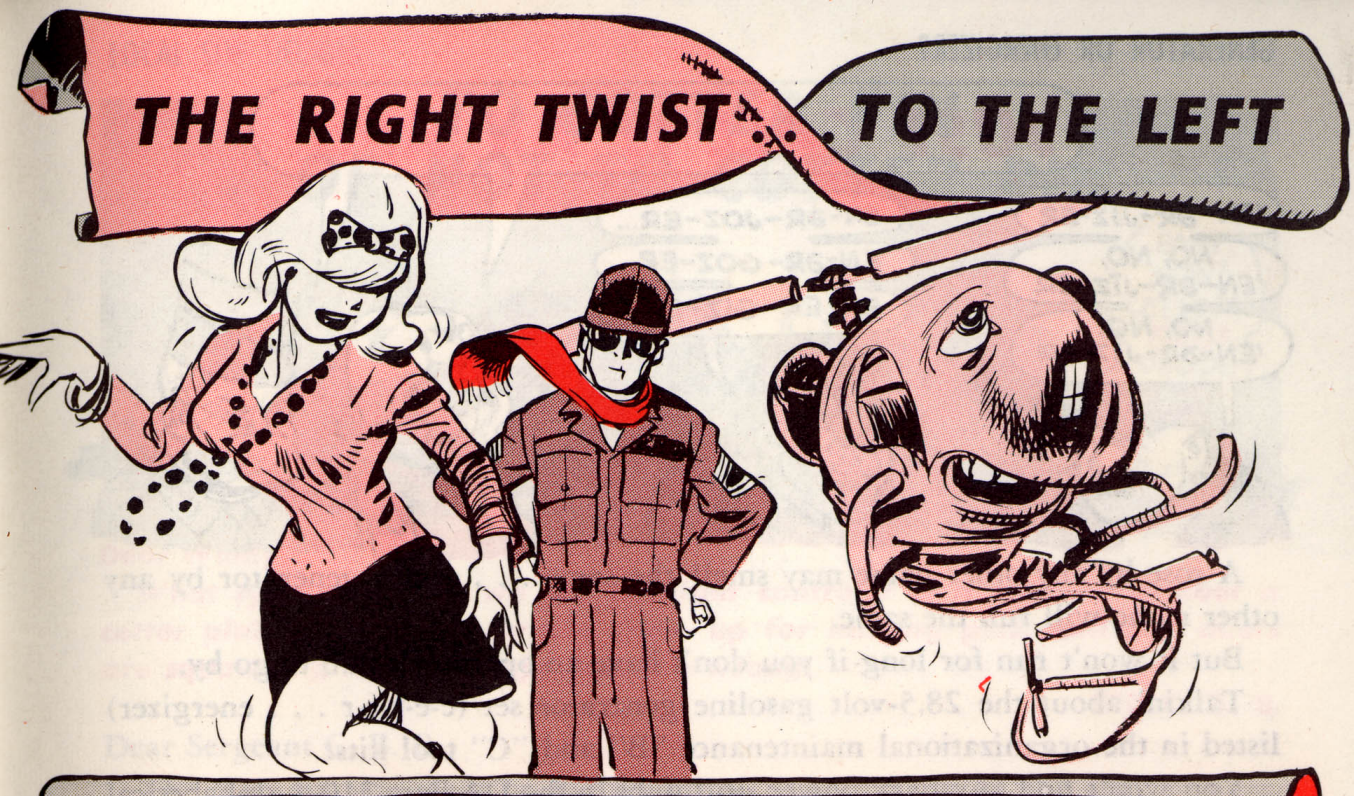
The only trouble is that this bracket will crack after a while if you plant your brogans there regularly. You know what that means — more aircraft downtime to get the bracket welded.



Your best bet is to latch onto the access ladder just behind the pilot compartment bulkhead.

Yessir-e-e-e, a little "savvy" goes a long way. No matter where you tread, tread lightly — no matter what equipment you operate, operate it by the book. A healthy Caribou is the big stick that'll deliver troops and cargo, right on target.

THE RIGHT TWIST . . . TO THE LEFT



Dear Windy,

The tail rotor rigging on our Sioux (OH-13) has been keepin' one of our pilots on the warpath lately. We keep riggin' the tail rotor controls just like it says in TM 55-1520-204-20 (1 Jun 65) para 9-22e, and every time about an eighth of an inch of the worm gear shows.

The pilot says the gear shouldn't show 'cause somethin' could get caught in there. So he writes it up . . . again.

H-e-e-l-l-l-p-p-p!

SP5 J. D. E.

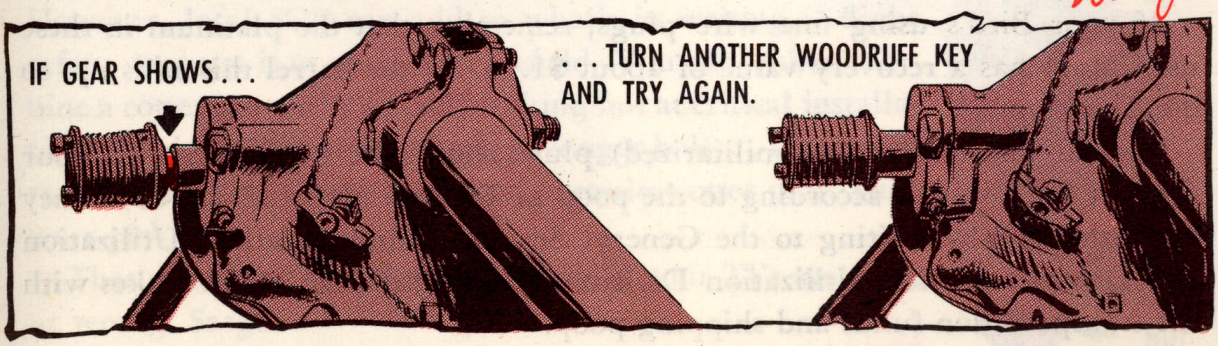
Dear Specialist J. D. E.,

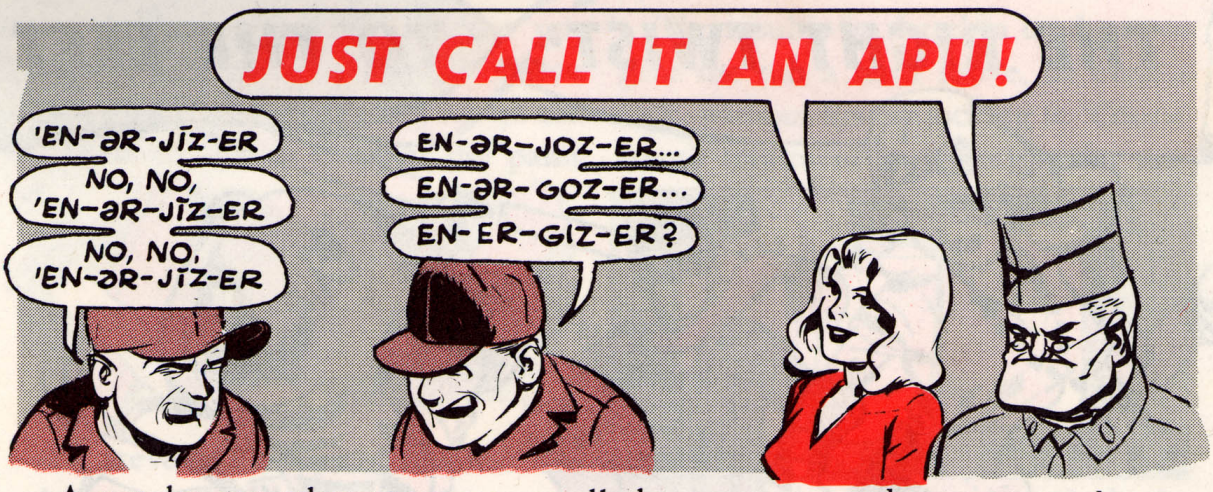
What you need is the right twist . . . here's how to get it. Turn the pitch change drum in all the way to the right. Now, back off on it one turn to the left and check it.

Somewhere between 1 and 1⅜ of a turn to the left you ought to be in business without the gear showing.

If the gear still shows, turn another woodruff key location and try it again. Be sure to aline the drum according to the TM.

Windy





A rose by any other name may smell the same . . . and a generator by any other name will run the same.

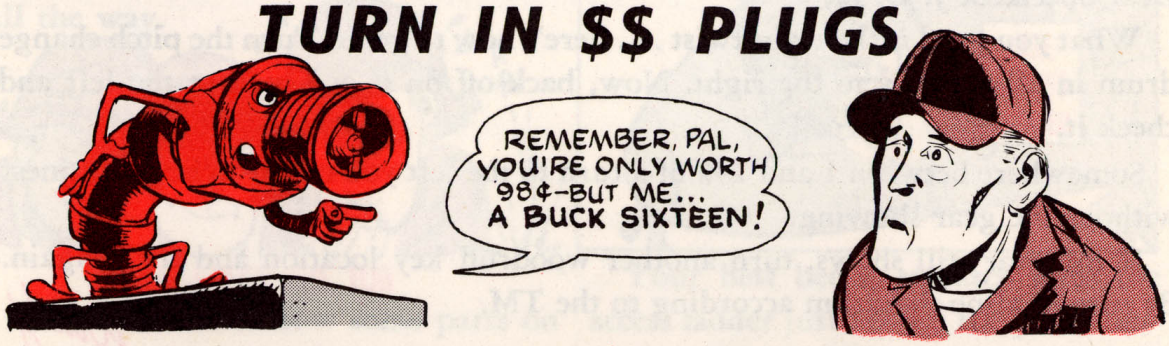
But it won't run for long if you don't have an operator's pub to go by.

Talkin' about the 28.5-volt gasoline generator set (e-e-r-r-r . . . energizer) listed in the organizational maintenance "B" and "C" tool kits.

You won't find auxiliary power unit pubs in the DA Pam 310-4 alphabetical index listed under Generator Sets. You will find them listed under Starter Energizer, Engine.

TM 55-1730-207-15 (11 Feb 65) is the pub for Engine Starter Energizer, Homelite Model 8D28-10, FSN 1730-776-7079, and Homelite Model 8D28-12, FSN 1730-863-5743.

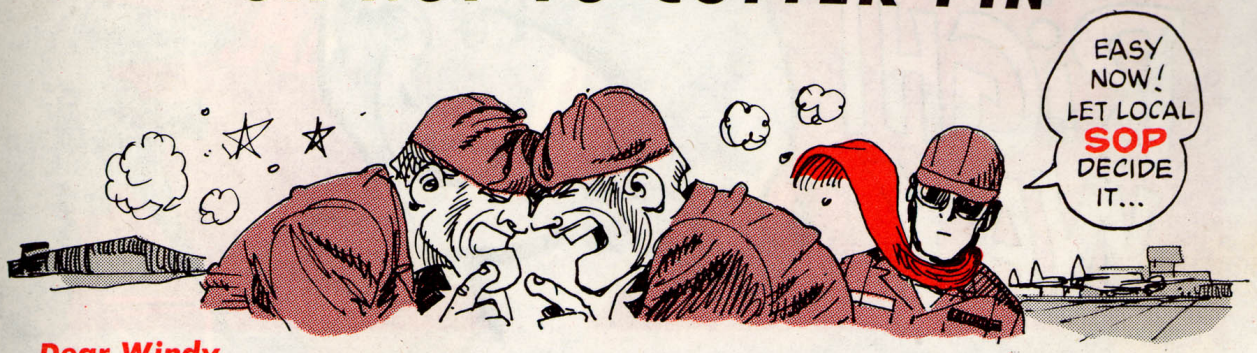
Another APU manual covers Engine Starter Energizer, Aircraft Appliances and Equipment Limited Model MG100-1, FSN 1730-996-5196. If this is the baby you have, your pub is TM 55-1730-206-15 (4 Sep 64).



If your Bird's using fine wire plugs, remember that the platinum in these used plugs has a recovery value of about $1.16. By the barrel this adds up, so don't toss 'em.

Instead, unserviceable (demilitarized) plugs should be turned over to your support for disposal, according to the poop in TB Avn 25-8 (22 Jan 65). They carry the ball by writing to the General Services Administration, Utilization and Disposal Service, Utilization Division, Washington, D.C. GSA makes with the transportation funds and shipping poop.

TO COTTER PIN OR NOT TO COTTER PIN



Dear Windy,

What type of nut do we use on flight controls? Is it with or without a cotter pin? Our TI's are writing them up for missing pins, and our chiefs are squawking that the inspectors are wrong.

SFC C. B. B.

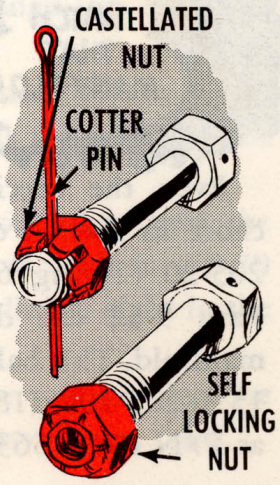
Dear Sergeant C. B. B.,

The type nut you want on flight controls is called out by the -20P requirement for each aircraft . . . either self-locking or a castellated nut with cotter pin. Any substitutes should be cleared with the maintenance officer and line chief.

TM 55-405-2 (Sep 62) — the general hardware guide — also makes a comment on control systems under para 25c(2)(g). That paragraph says you don't use self-locking nuts at flight control system joints where there's a possibility of movement between the nut and the surface which it's bearing against.

The -2 adds in para 25d that AN 310 castellated nuts can be substituted for AN 365 self-locking nuts, but **only** when cotter pins are also used. No mention of a new type MS 17825 or MS 17826 self-locking castellated nut is made. But, when you do use one, be sure it gets a cotter pin.

The only other comment in the -2 is in para 25a(2)(d). Here the hardware guide says that bolts, studs or screws of 5/16-in size or larger—which happen to contain pin holes—can be used with non-metallic self-locking nuts. But the -2 does not mention actually using the cotter pins themselves in any specific self-locking nut installation.

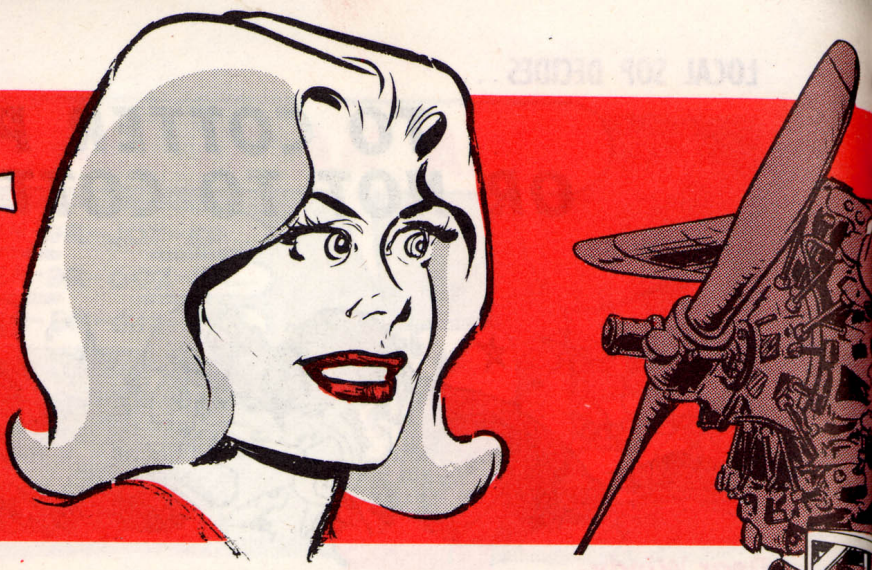


So nothing in print says you can't use self-lockers on flight controls — or that you have to use cotter pins if you do. However, local SOP can add to what's in writing if flight safety suggests it at your own airfield. You can either combine a cotter pin with each self-locking nut at critical installations (by drilling the nut or using a longer bolt) . . . or switch to castellated nuts, which definitely require cotter pins. Take your pick.

That means local SOP would decide if your TI's are right or wrong, Sarge.

Windy

THE RIGHT WAY



A bird in the hand may be worth two in the bush—but a tool in the hand isn't worth a couple of special tools in the tool crib . . . not by a long shot!

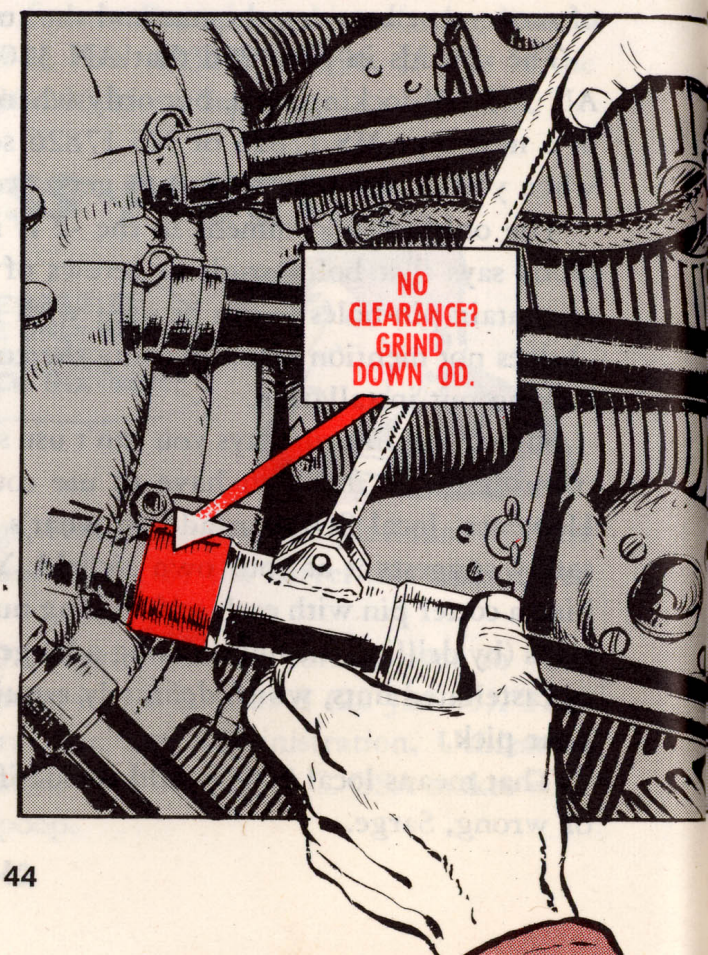
Special tools supplement those in your general mechanic's tool kit and in your unit's organizational maintenance A, A supplemental, B and C tool kits. And any time you try to substitute for a special tool some mighty expensive aircraft equipment can take it on the chin.

Take the engine pushrod cover gland nuts in the Beaver (U-6), f'rinstance. It might be easier to reach for the nearest spanner wrench to use on the nuts, but don't . . . a spanner will crush the pushrod cover and ignition manifold for real!

Even the special wrench for this chore as spelled out in TM 55-1510-203-20 (2 Aug 65) Chap 5, Sect II, Para 5-52 can damage the ignition manifold. This baby is listed in TM 55-1510-203-20P (18 Sep 64) Page 3-31 as P/N PWA 5630.

But don't sweat it. If you don't have adequate clearance with this wrench, just grind down the OD until you do have clearance.

Another special spanner wrench, authorized in TM 55-1510-205-20P (7 Jul 65) for the Otter (U-1A) carries P/N PWA 2812. This baby will give you plenty of clearance and will work equally well on the Otter or Beaver push rod cover gland nuts.



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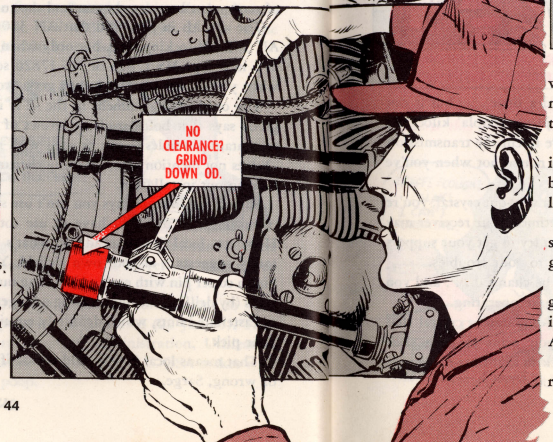
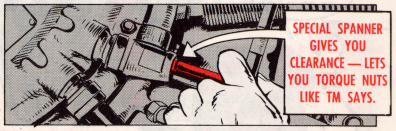


When it comes right down to it, tools, as well as bird parts, can take quite a beating if they're not used right. A good example is the ever-lovin' torque wrench. Drop it or use it for a torque range it's not made for and you'll wind up with a false reading.



The whole idea of a torque value is to get bird hardware tightened right. Then, if a cotter pin is left out by mistake, there's less chance of a nut backing off . . . and the roof falling in!!!

Take f'rinstance, torque wrench, FSN 5120-595-9073, in your general mechanic's and A, B, C tool kits. This baby is used for the 100-750 in-lb range (no more, no less).

If you turn it down from the minimum 100 in-lbs to, say, 50-70 in-lbs you're guessing that the wrench will give you the right torque.

'Course torque wrenches were designed to take the guess work out of maintenance. The wrench for 50-70 in-lbs, FSN 5120-542-4489 (5-150 in-lbs) is right in the A, B, C tool kits.

So, there's just no substitute for the real article. The right tool for the job used the right way—sure 'nuff.

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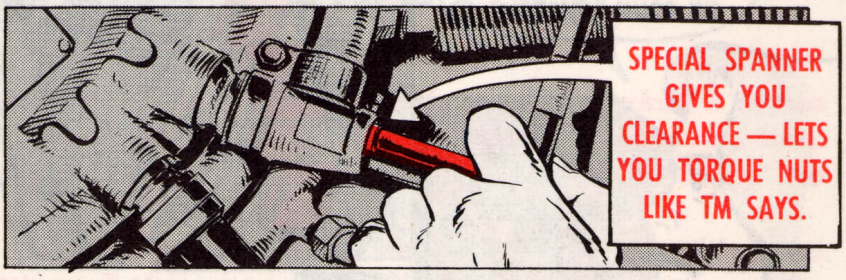

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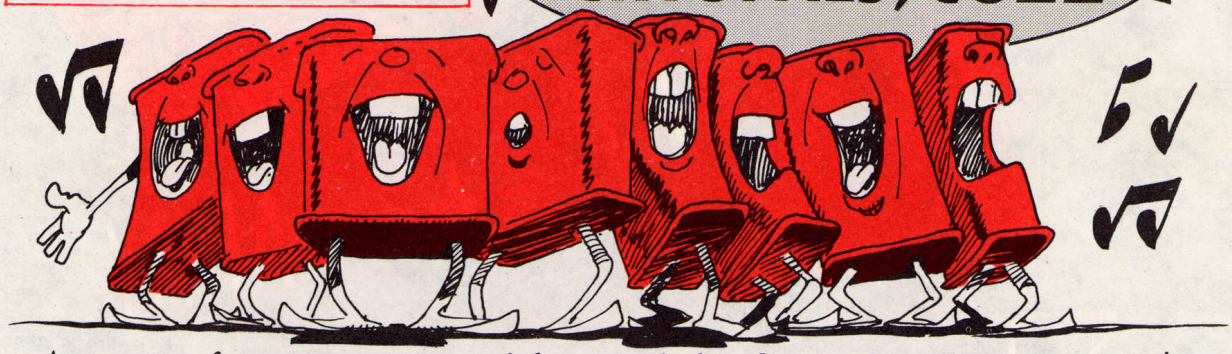
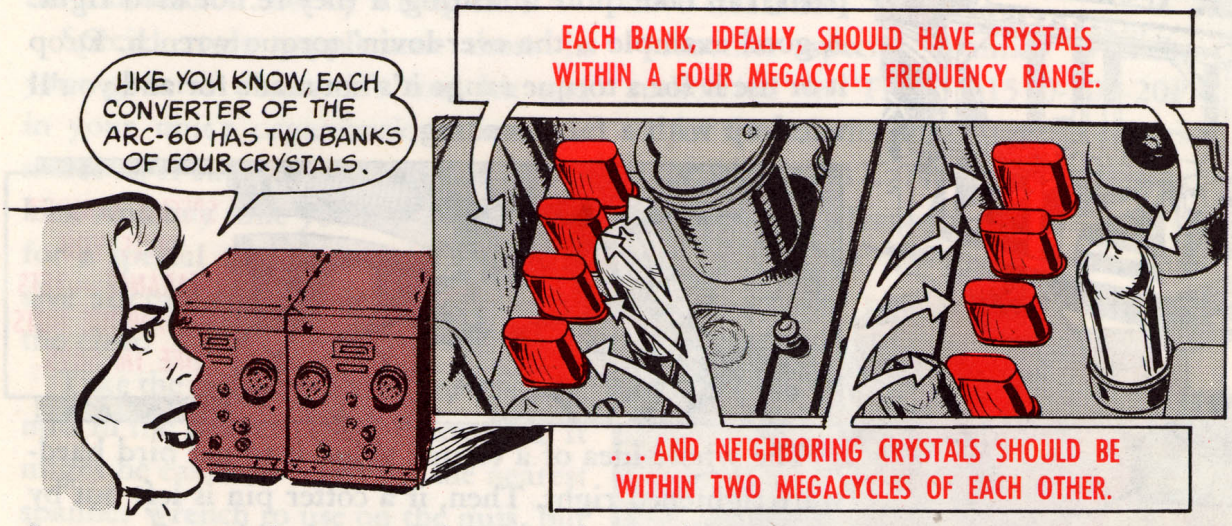
AVIONICS

NO CRINKLING THE CRYSTALS, CUZZ



A way-out frequency or two might come in handy occasionally on your AN/ARC-60 radio set, but it isn't worth it to you.

To use it, you'd have to sacrifice one of your assigned frequencies . . . or, at least, lose considerable range.



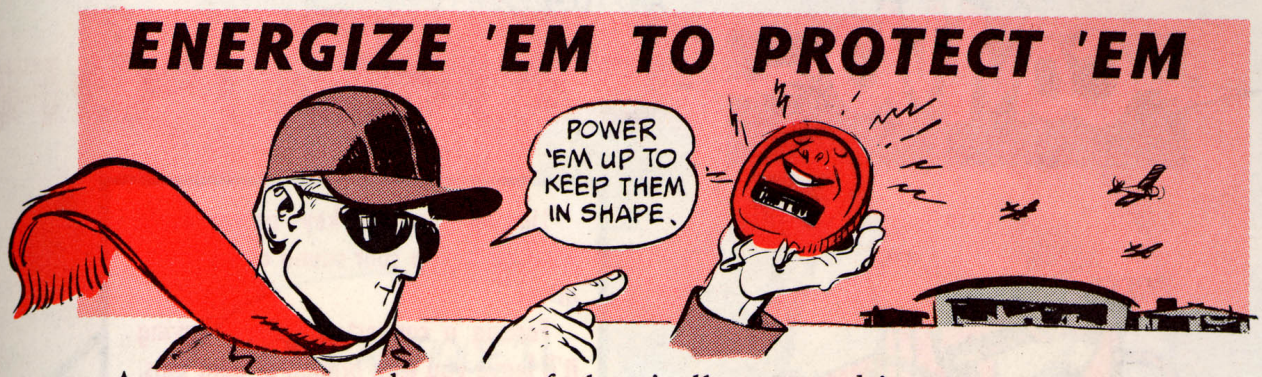
In some areas, the megacycle range has to be stretched a little . . . but it can only stretch very little. Tuning one crystal in a bank just a coupla' kilocycles beyond the four megacycle limit means that you'll have to cut the transmission range on one frequency down to almost nothing. That's not so hot when you've got a tower to raise.

Which means, briefly, that even if you could tune in a way-out crystal, you're pretty sure to lose one of your required channels. Sometimes, your receiver may tune the crystal, but your transmitter won't. And, if you try to get your support to aline your set to the way-out crystal, you only add to your troubles.

To get out of your assigned ranges, your set has to be changed . . . and you need parts. It's alined specifically for the area where you're operating.

Do yourself a favor and don't requisition or local-purchase a crystal that doesn't fit into your 16 working channels. And, if you want to keep your ARC-60 the good ol' reliable workhorse that it is, stick to that four-megacycle spread as closely as your required frequencies will let you.

ENERGIZE 'EM TO PROTECT 'EM



Any gyro — or other type of electrically-powered instrument — needs protection from shock just as much as air, vacuum or mechanically-powered aircraft components.

Since moving parts of electrically operated instruments have less shock protection while at rest, they should always be energized before your aircraft starts to roll. Their own internal motors will then help to damp out most of the shocks to the moving parts.

So always power all electrical source instruments, including radio controls, before and during takeoffs and landings — particularly over rough terrain.

SAVE THE AN/APX-44!

Dear Editor,

Passengers in the Seminole (U-8F) can use a little reminder when it comes to loading luggage into the upper rear baggage compartment in the cabin. That's where the RT-494( )/APX-44 is located, with the blower facing the baggage.

The problem is that baggage can get piled behind the rear webbing, up against the blower, cutting off the cool air to the IFF set. When this happens, the set starts smoking and the pilot has a real in-flight emergency on his hands.

So, here's a little metal sign we hooked on the rear webbing to guard against this revoltin' development. It works like a charm.

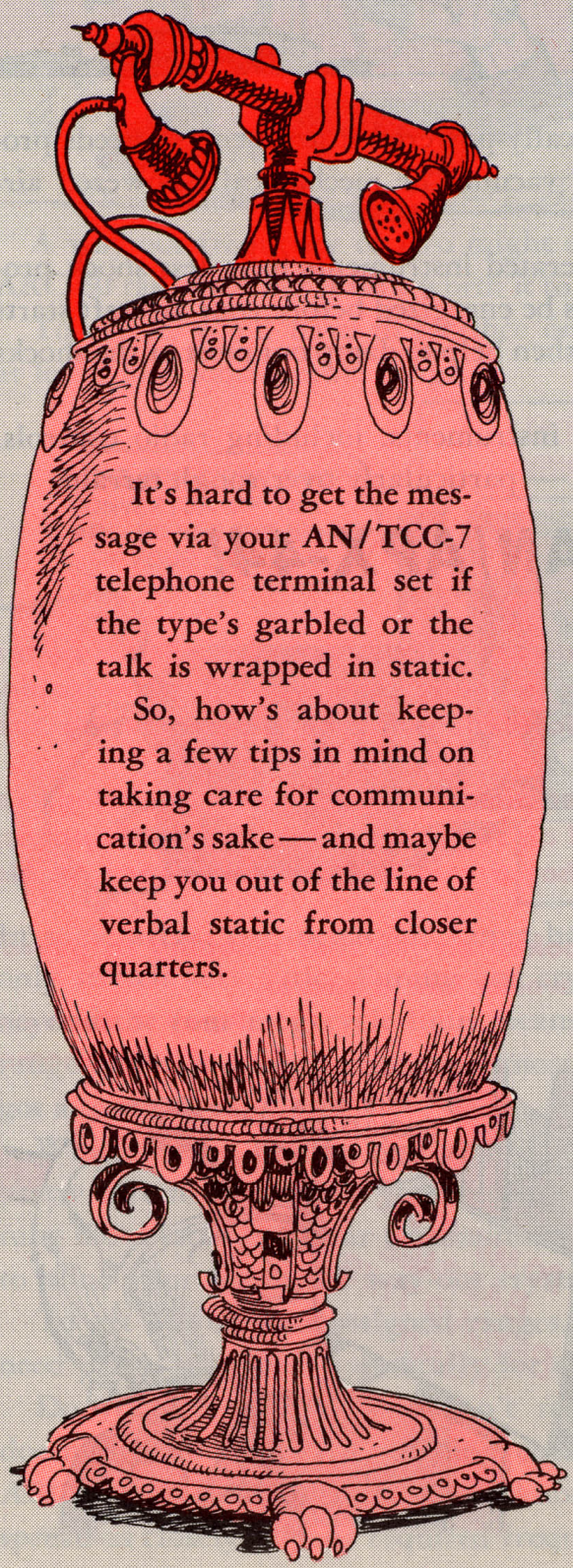
Perry H. Deevers
Fort Sill, Oklahoma

(Ed Note — A word to the wise. . . .)

COMMO

AN/TCC-7 . . .

CARE FOR



It's hard to get the message via your AN/TCC-7 telephone terminal set if the type's garbled or the talk is wrapped in static.

So, how's about keeping a few tips in mind on taking care for communication's sake—and maybe keep you out of the line of verbal static from closer quarters.

Line up connector keys or you could wind up with a sour sound or no sound at all.

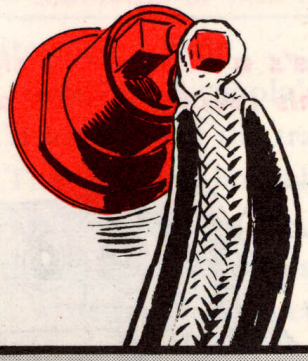
Forcing a connector without keying it'll leave you with broken or bent pins.

Now take a gander at the OA-443/TCC-7 receiver-transmitter test set group for a second.

If the PL-68 test plug is left dangling from the test panel (TS-760/TCC-7), it can take a beating from big boots.

When the plug's bent, broken or pulled out of the panel, it'll change testing to guessing and you might not be on anybody's band.

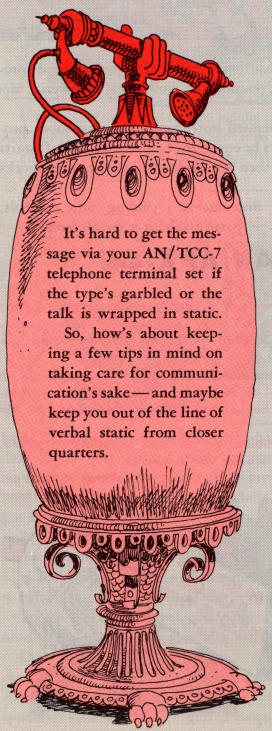
The AM-707/TCC-7 or -708 amplifier-pilot regulator, E105 stud terminal can get broken loose and touch the case. This'll give you extra noise that'll get picked up in the line. Being on the bottom of the drawer, the terminal needs to be looked at often.



Speaking of big-booted feet, those fuse holders on the PP-826()/U and PP-827/U power supply units aren't rests for tired dogs. A little foot pressure can break the holders and silence your set.

COMMO

CARE FOR AN ANTIQUE



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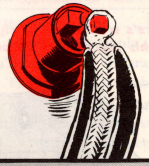

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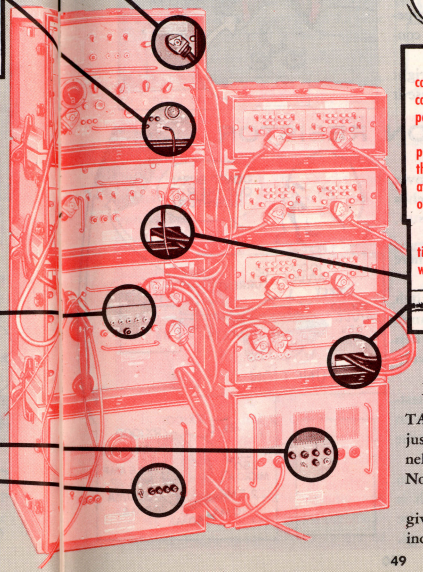


Watch for frayed cables, especially those cables coming out of the TA-228/TCC-7 carrier supply panel and TA-227/U subgroup panel.

The pullin' out and pushin' in of these panels'll rub the cables along the rail (inside the front panel), and the rail will take digs at the cables. It could add unwanted sounds or take away the sound altogether.

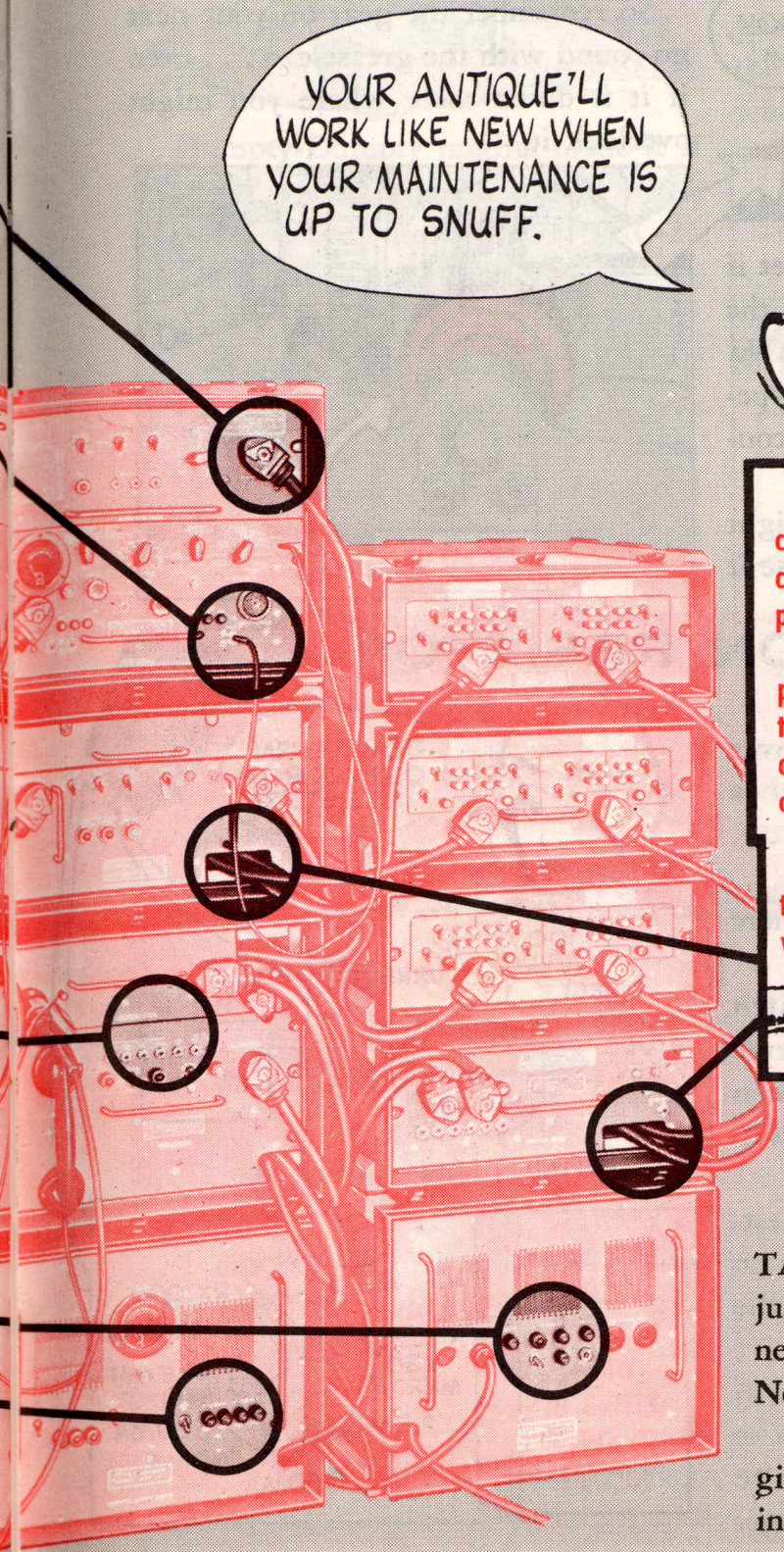
A couple or three wraps of electrical insulation tape where the cables come in contact with the case'll lengthen their life.

A final point . . .

When you're settin' up the Antique's TA-219/U telephone modem, first adjust channel No. 1 (12 kc), then channel No. 3 (28 kc) and last, channel No. 2 (37 kc).

Any other pattern of adjustment'll give you unwanted sound and a false indication that maintenance is needed.

AN ANTIQUE



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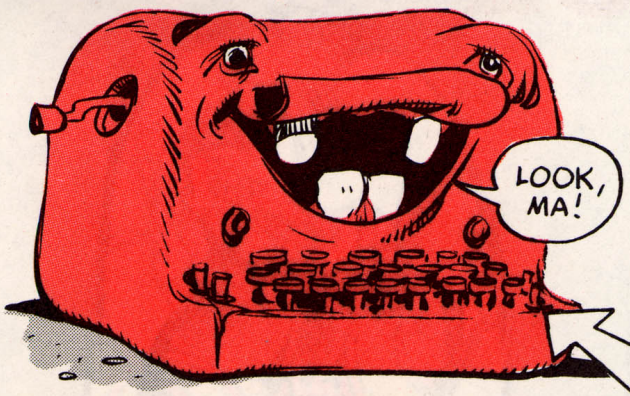
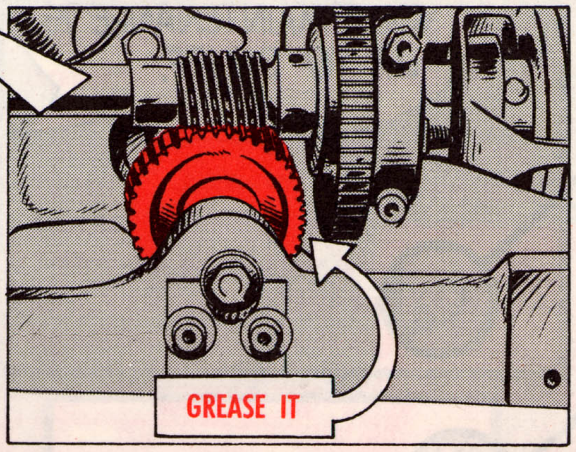
DON'T LET YOUR GEARS SLIP



A slippery gear is what you'll get if you forget to dab some grease on the carriage feed driven gear of your AN/FGC-20( ) and AN/UGC-4 teletypewriter sets . . . especially during continuous operation.

Fact is, the gear can get downright bald of teeth if you forget to grease it about every week or so during steady operation. That kind of slippery you don't need.

So remember the gear on your next go-round with the grease can . . . even if it is down there where you might overlook it.



ROUGH ON RESISTOR

Wait! Hold it!

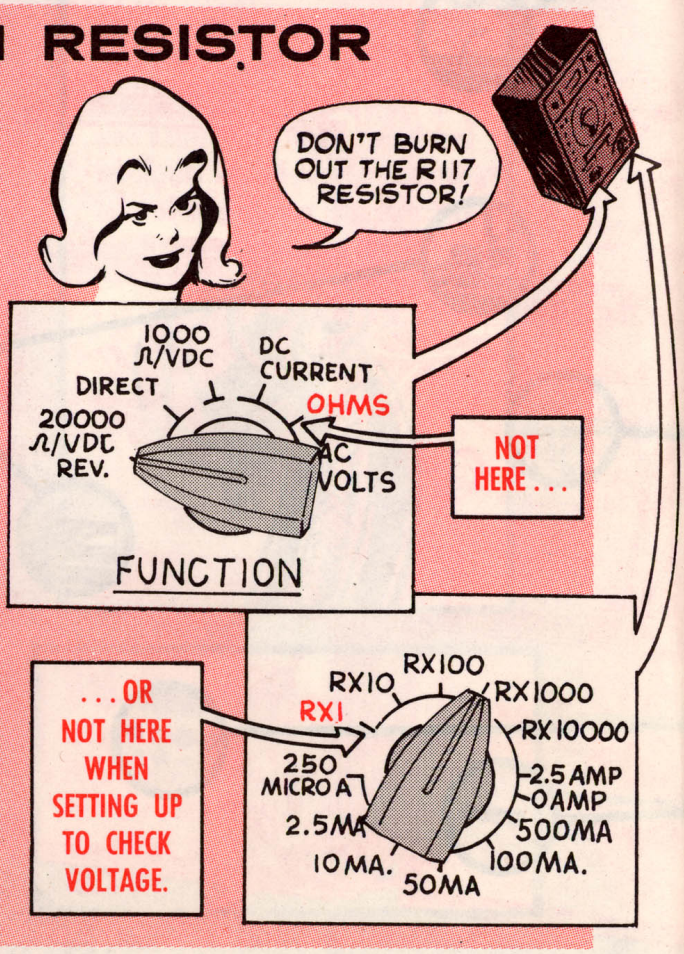
You've told yourself over and over and over again to eyeball the **switches on the TS-352( )U multimeter . . .** but you forget.

Maybe, you need a reminder. So, here it is . . .

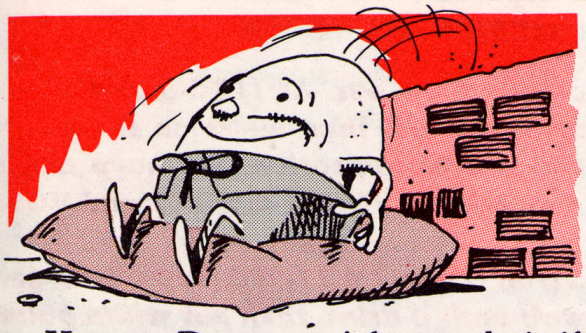
Never leave the FUNCTION switch in the OHMS position and the range switch in the RX1 position when you're settin' up for checking voltage.

Touching the equipment you're testing with the multimeter's switches on OHMS and RX1 will burn out the R117 resistor.

The key to saving the resistor is to make sure the FUNCTION switch is not in the OHMS position when you're using the TS-352 to measure voltage.



LOCK THE SHOCK LOCK



Humpty-Dumpty mighta made it if he'd had a cushion to handle the shock . . . like the one in your AN/TRC-24 radio terminal set's T-302 transmitter.

That's right!

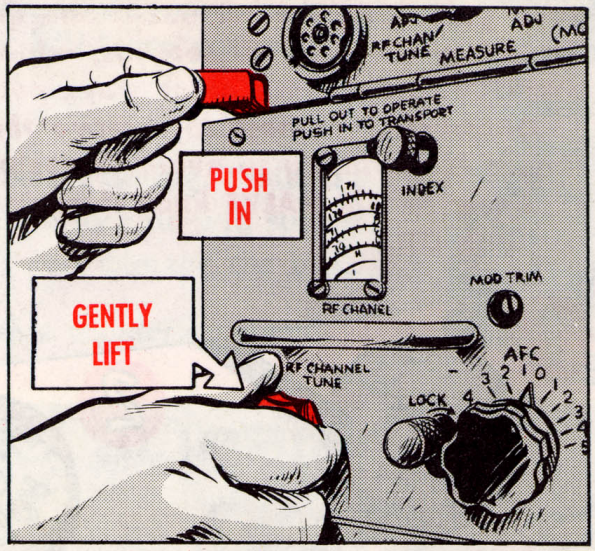
Old egghead would've fared better snugged firm in his crate when he was moved about.

This problem's solved with your Track-24 'cause when the word comes to "move out" you push in the vibration mount lever and the T-302's restin' rigid in its mount.

Bouncing around through bumpy places'll go hard on the shocks and damage the equipment when the lock's not locked.

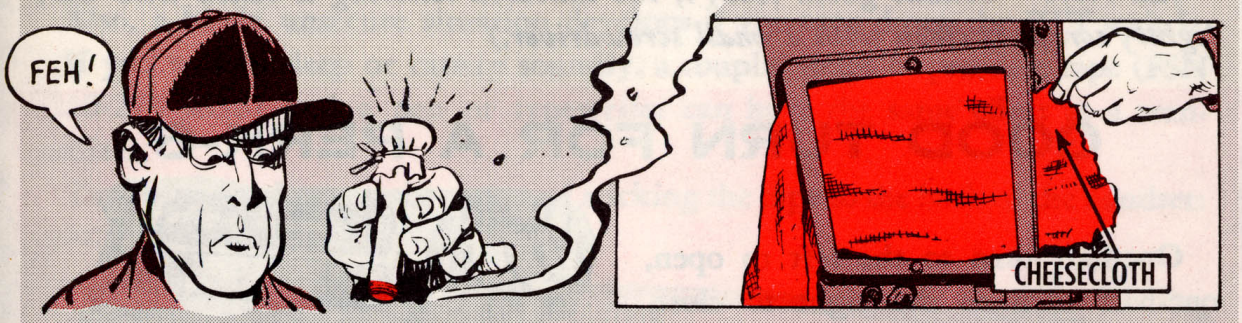
If the shocks are saggin' a little from old age . . . don't sweat it.

Get a grip on the RF CHANNEL TUNE knob and gently lift up as you push in the vibration lever. This'll save the lever from breaking or bending when you put pressure on it for locking.



Of course, when you're settin' up for sending signals remember to pull out the lever so the transmitter's innards can ride free and easy on the shocks.

A THINKER'S FILTER



It may be old hat to oldtimers, but cheesecloth still makes a mighty fine temporary air filter when you're in a bind.

For a bracket-type filter, or any other where you can leave an overlapping edge, snug several layers of cheesecloth down, and trim the excess edges with a pocketknife.

Six cents gets you a yard of cheesecloth via the GSA catalog, with FSN 8305-170-5063. If you've got other uses for it, you can get 10 pounds for $4.90 . . . with FSN 8305-141-2503.

PAINTING PERK-6 KNOBS

Dear Editor,

When it came to doing touch-up painting on our AN/PRC-6 radio set knobs, relettering 'em with white paint was a less than welcome chore.

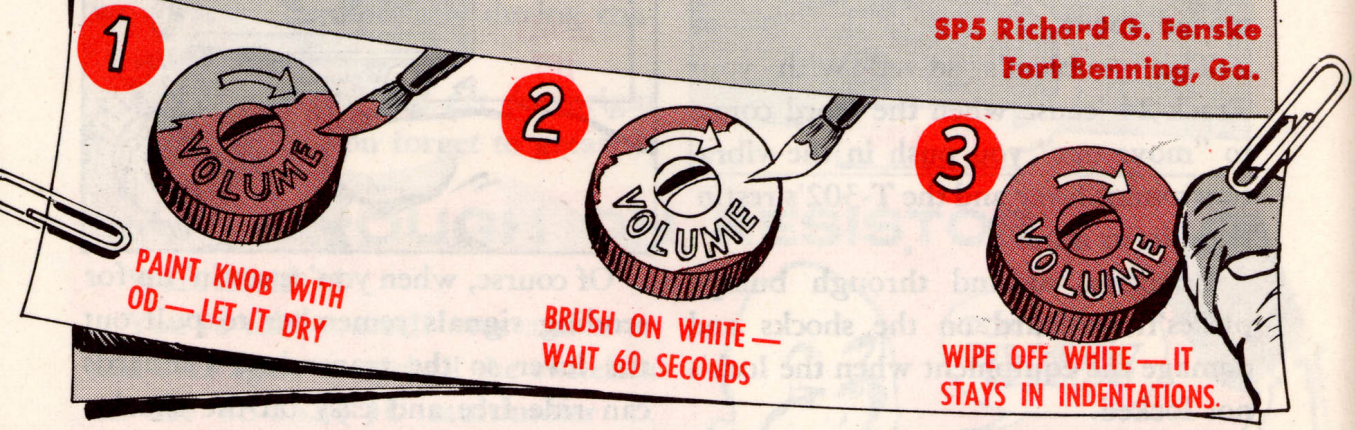
But now, without even a Rembrandt in our organization, we have a fix that works for the indented letters on the AIR VALVE, EXT-OFF-INT and VOLUME CONTROL knobs.

After doing like it says in Change 3 (Feb 63) to TM 11-296 (Sep 55) to get ready for painting, we put on the OD, wait until it dries, then put white paint (one gal, FSN 8010-297-0584; one qt, FSN 8010-087-0107) over the sunken lettering. We wait 60 seconds, wipe the knob with a clean cloth, and . . . PRESTO! . . . the white paint stays put in the indented letters.

Of course, it's best to remove the EXT-OFF-INT and VOLUME CONTROL knobs for painting to avoid "freezing."

Since the AIR VALVE knob doesn't come off, care's needed when touching up with OD.

SP5 Richard G. Fenske
Fort Benning, Ga.

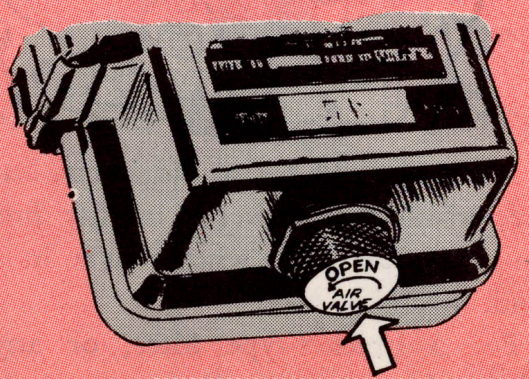


(Ed Note—Sounds good. And, if the indented lettering is caked with OD, lightly scrape it clean with a small screwdriver.)

GOOD TURN FOR A PERK-6

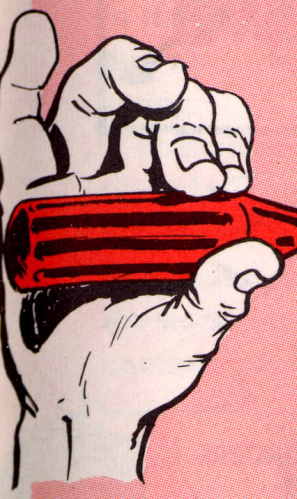
One-half turn to the left to open, one-half turn to the right to close. That's all that's needed to operate the air valve on your AN/PRC-6 radio set.

Too much turning'll twist that knob right out and if it gets away from you on a dark night or in a dense jungle, moisture can get inside and put your set out of business.



HALF TURN LEFT TO OPEN . . .
HALF TURN RIGHT TO CLOSE.

SCREWED UP PERK LOCK



Whether you have the grip of a cow milker or a mechanic, back off with the muscle.

Handle that screwdriver like a feather in your fingers when you're snuggling down the DIAL LOCK screw on your AN/PRC-8 through -10 series radio set.

Tightening the screw too much could strip the threads or break the screw. It'll leave you with a loose or lost lock lever.

And, another thing . . .

. . . Be sure to unlock 'er before tuning. Trying to set up your frequency with the lock on will spring the TUNING control shaft and damage the lock.

Then, you'll wind up with a wandering signal.

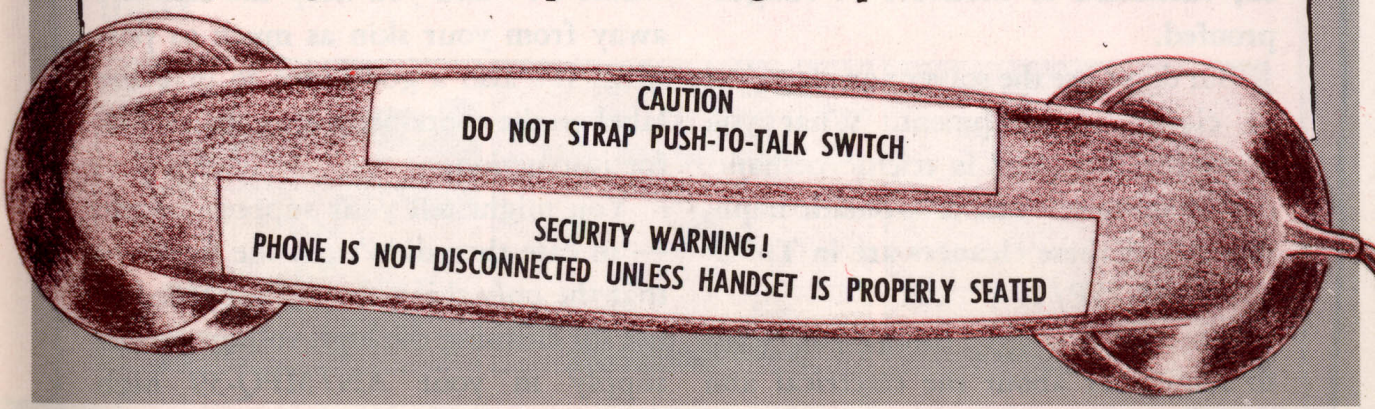
YOUR TALK IS SLIPPING

Hey, Joe! If you wanna keep the word in the right family, you better make sure the handsets of your TA-43/PT and TA-312/PT telephone sets are seated firm-like next time you sign off.

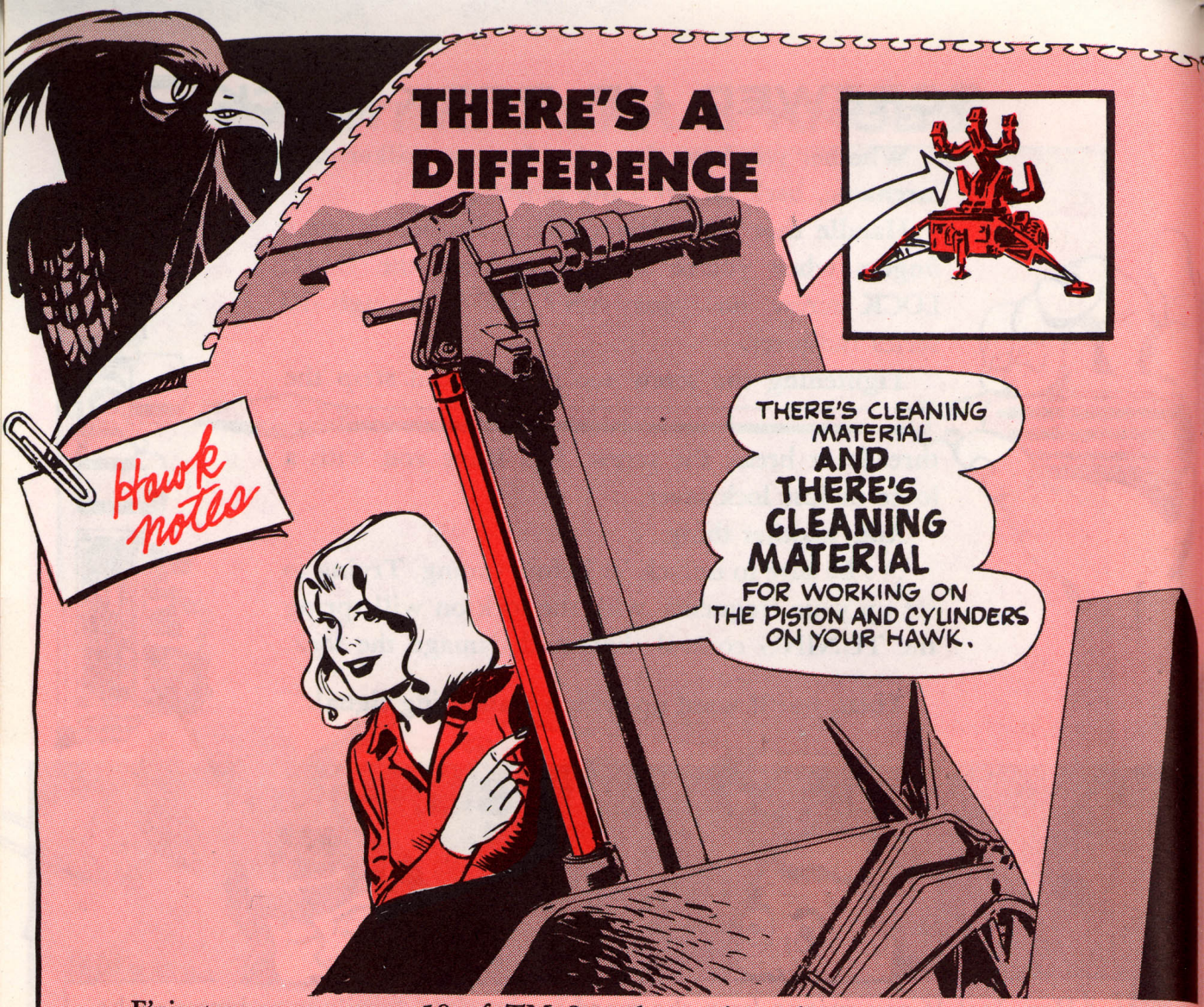
Also, a kinda unsecure situation develops if you tape down the PTT switch.

If you wanna sleep or catnap soundly, a coupla' strips of pressure tape (FSN 7510-273-9838) and a pen or typewriter can have the same effect as a tranquilizer.

Try printing these on the tape and sticking the tape to the back of the handset:



THERE'S A DIFFERENCE



F'rinstance . . . page 50 of TM 9-4935-501-15P/1 (Jun 65) lists a gallon of cleaning solvent that you can get under FSN 6850-597-9765. This is great for cleaning things like your launcher actuator pistons and cylinders and other spots that haven't been painted, varnished or moisture or fungus-proofed.

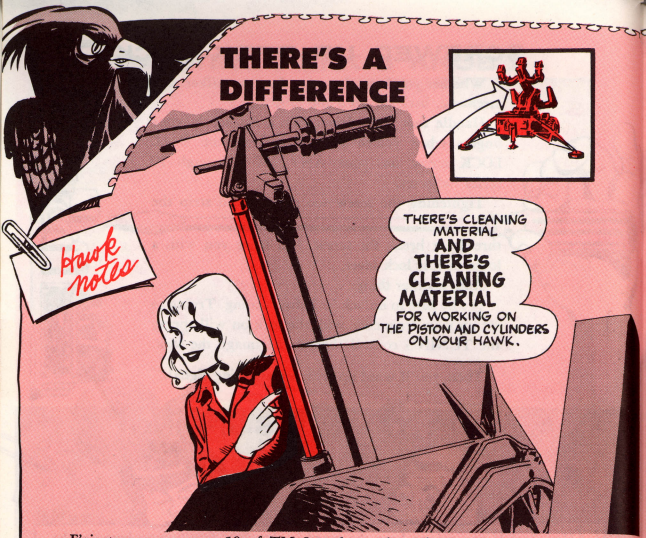
But don't use the solvent on electrical or electronic equipment. What you want for this gear is trichloroethane, dry cleaning solvent, or aromatic naphtha. All of these cleaners are in TM 9-4935-501-15P/1.

There're a couple things you want to remember about the electrical and electronic equipment cleaners.

For one thing . . . if you let wiring soak in one of the solvents, the insulation can take a beating.

And when you use the solvents, make sure you have lots of ventilation . . . you steer clear of taking too many whiffs . . . and you keep the cleaners away from your skin as much as possible. It's also a good idea to give the label on the container a long, hard look for instructions.

You might tell your support people — in case they didn't get the word — that the only thing they're supposed to use for cleaning the high voltage power supply in your AN/MPQ-39 high



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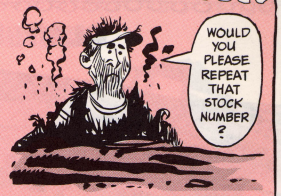
You might tell your support people — in case they didn't get the word — that the only thing they're supposed to use for cleaning the high voltage power supply in your AN/MPQ-39 high power illuminator is methanol. And methanol is also in TM 9-4935-501-15P/1.

Why not use any of the other solvents in the HVPS? They might leave a residue that could lead to such things as arcing.

Something else . . . when you requisition cleaning solvent for working on the launcher actuator pistons and the like, make sure the last four digits of the stock number read 9765. When the numbers come out 9675, they're for a volatile cleaning solvent. And this stuff can have you airborne in a split second if it meets up with a flame.



Right handy.

That's what the launcher control unit is when it's mounted on your Hawk launcher . . . and you want to climb up on the launcher. You can use the LCU as a step.

You can, all right, but you sure ought to climb around it instead of on it.

So maybe it won't fall off the mounting bracket with you on it — not right away. But it can't take a lot of weight. The mounting studs get so loose after a spell that water has no trouble at all in getting inside the unit. And there's also a good chance that the back of the LCU will become so bent that you won't be able to put it on the mounting brackets that're on the launcher and the LCU tripod.

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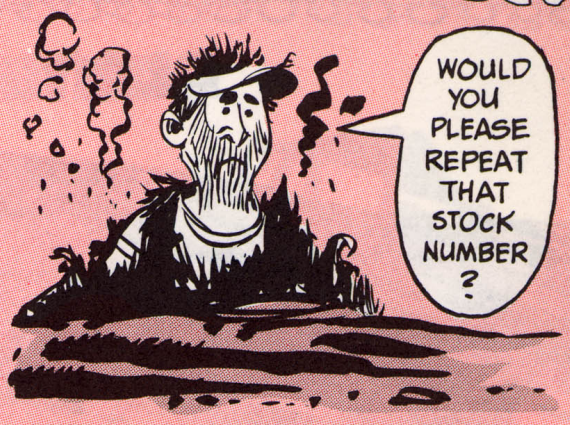

AROUND, NOT ON

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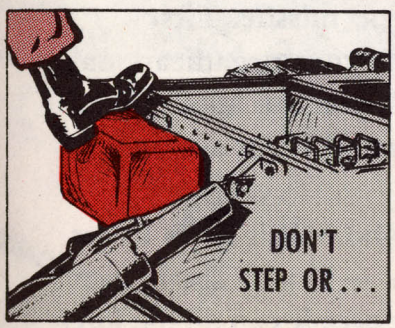
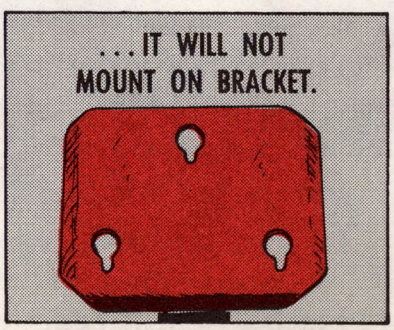
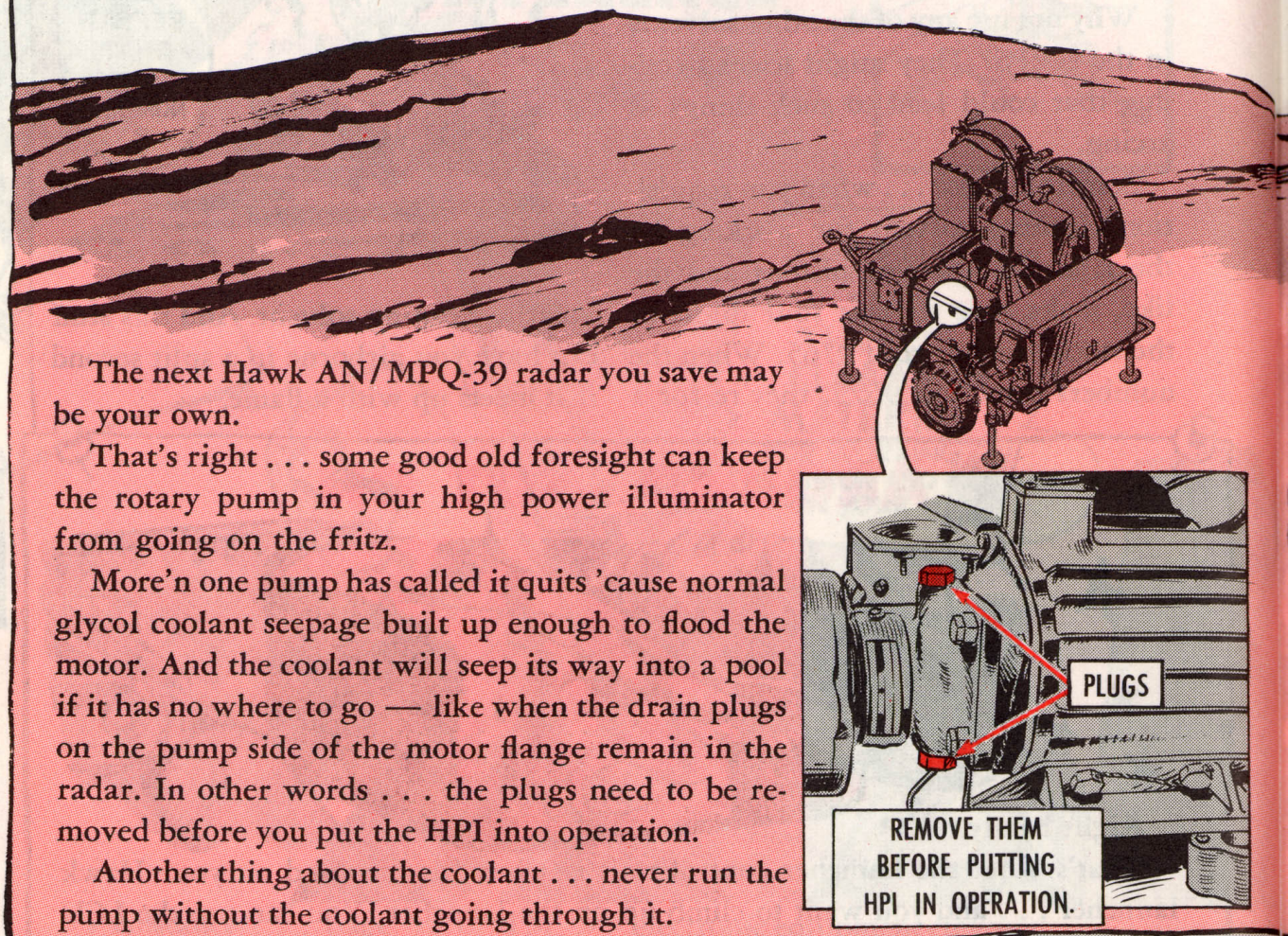




PLAY IT COOL



The next Hawk AN/MPQ-39 radar you save may be your own.

That's right . . . some good old foresight can keep the rotary pump in your high power illuminator from going on the fritz.

More'n one pump has called it quits 'cause normal glycol coolant seepage built up enough to flood the motor. And the coolant will seep its way into a pool if it has no where to go — like when the drain plugs on the pump side of the motor flange remain in the radar. In other words . . . the plugs need to be removed before you put the HPI into operation.

Another thing about the coolant . . . never run the pump without the coolant going through it.

SO

It's actual . . . but it's not satisfactual.

That'd be a Hawk missile tunnel section (FSN 1420-604-9898) that's too long. And somehow a number of tunnels that're one-inch too long got into the supply system.

It's easy enough to spot a bum one once it's on the missile. First . . . every time you go to make a GO-NO-GO check with your organizational maintenance test set, you have to lower the tunnel so's you can hook up the test cable. And second . . . a tunnel that's too long can stick out as much as ¼-in from the tailcone.

You don't want to give a too-long tunnel the heave-ho. All it takes to get it back into shape is to have it shortened by one inch — from a shade over 129 inches to little better than 128. And your support people can do the job.

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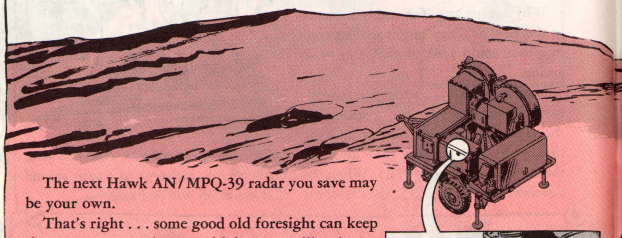

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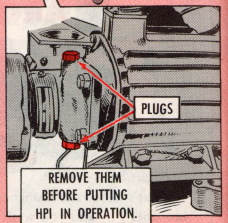
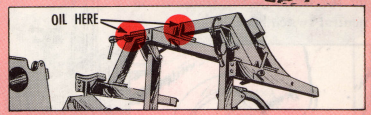


IN A BIND?



Take the missile latch and release mechanisms on your Hawk XM501E2 loader-transporter as a f'rinstance. Note 9 in your LO 9-1450-500-12 (28 Jun 63) tells you to oil the mechanisms quarterly.

By putting OE on the mechanisms the way the LO says, you head off binding troubles — the kind that won't let you release the missiles — especially the center one. The linkage for the center bird is more involved, of course, so make sure you get all the points.

SO LONG

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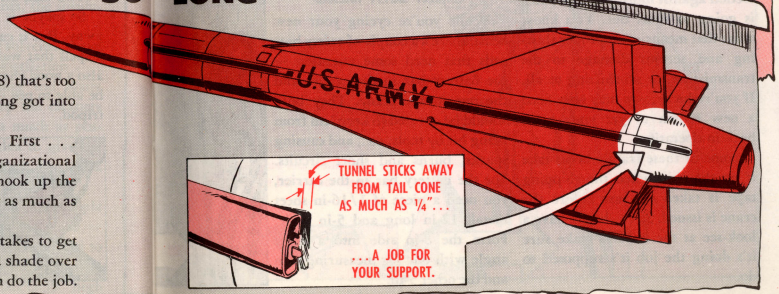

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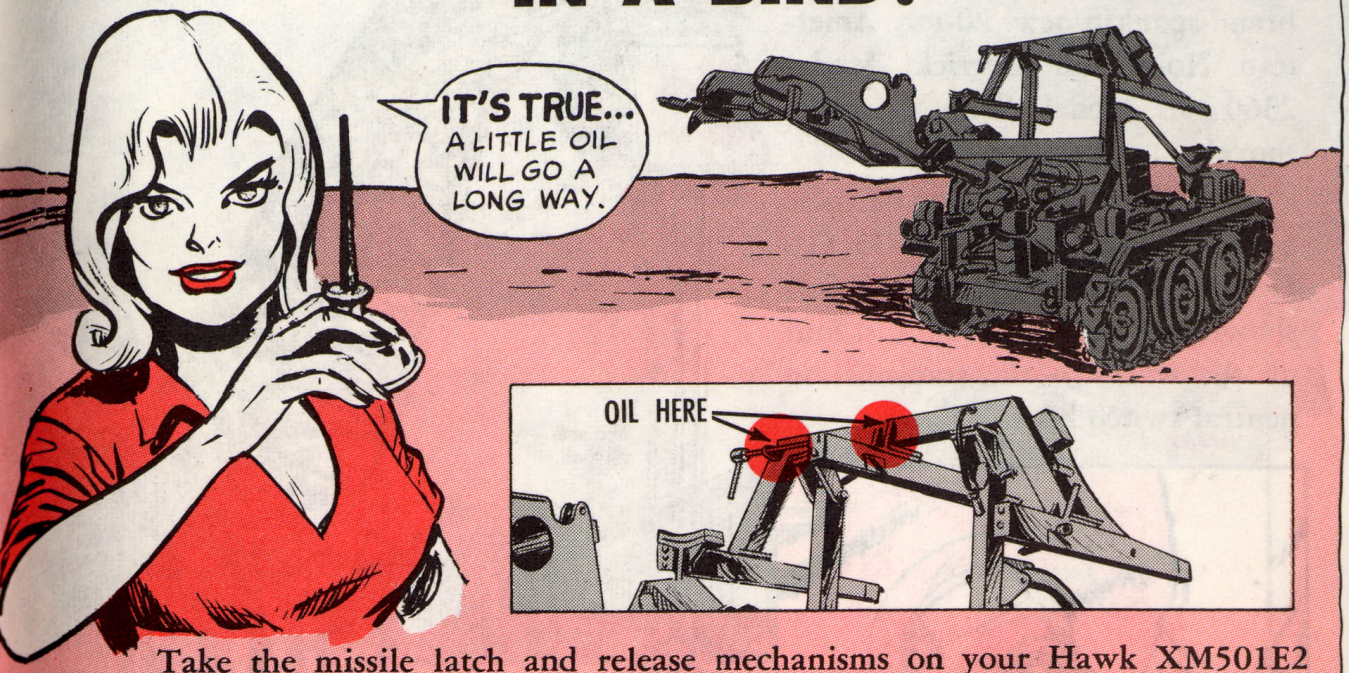

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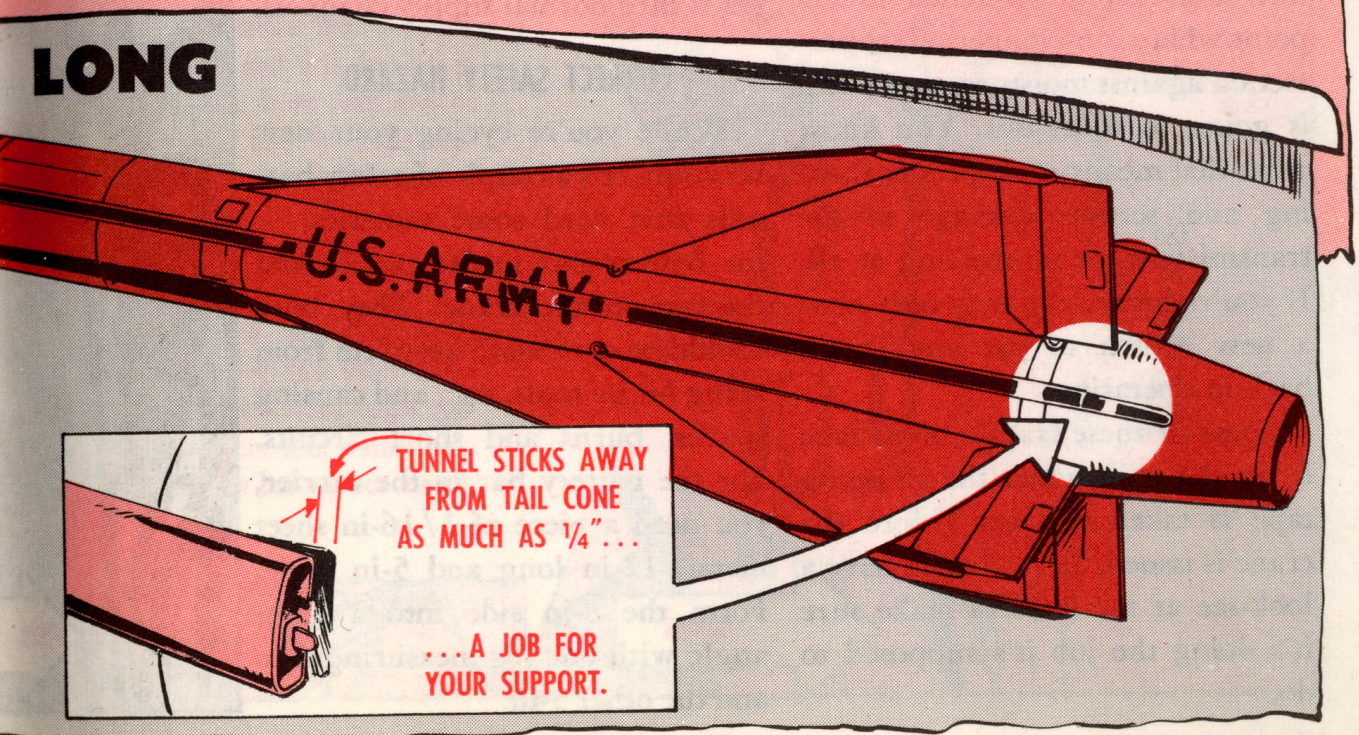
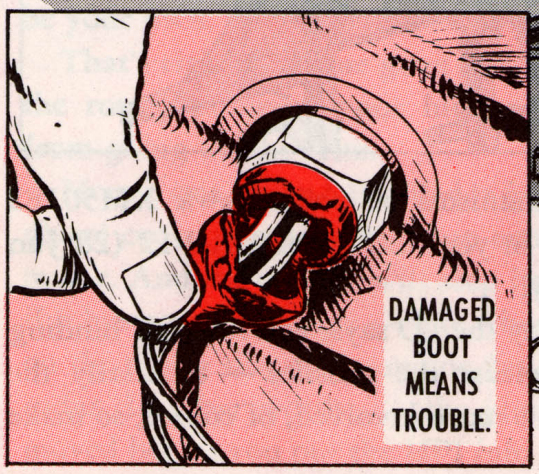


TOTE THAT LOAD, BUT . . . CHECK

Say your outfit just got a brand-spankin-new 20-ton American Hoist and Derrick, Model 2360 or Model W2360 crane-shovel.

You'll find all the poop on these babies in TM 5-3810-227-15 (10 Dec 64) but there's one little part shown in Figure 239 that can foul up the works — the transmission neutral switch boot.



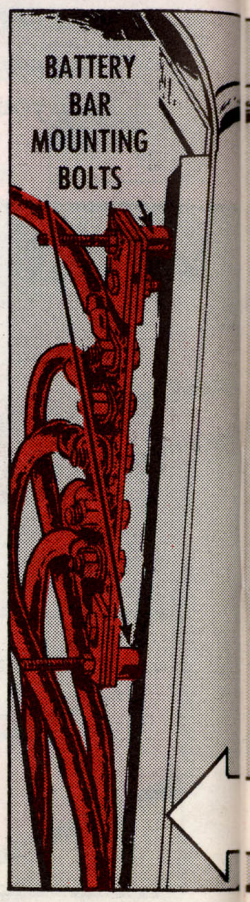
Now, if this rubber boot gets torn off, cut, or stretched to the point where it no longer offers protection against moisture, the switch is going to short out. You know what that means — improper shifting and serious damage to the transmission, or no shifting at all. If you're lucky, you may only need a new switch to get your beast back in operation.

Some of these fragile boots take it on the chin when the shipping tape is taken off just before the crane is issued. So . . . better have a look-see at the boot to make sure it's doing the job it's supposed to do.

If the boot's shot, a new one carries a manufacturer's part number 224621 (code 12603) and you can get it thru normal supply channels.

CORRECT SAFETY HAZARD

While you're eyeing your new beast, there's a couple of safety hazards that need some attention — the battery bar in the carrier and the one in the crane. They both should be covered to keep 'em from being hit by tools, etc., and causing sparks, burns and short circuits. For the battery bar in the carrier, you need a piece of 1/16-in sheet metal, 12-in long and 5-in wide. Form the 8-in side into a right angle with one leg measuring 3-in and the other 5-in.



TOTE THAT LOAD, BUT . . .

CHECK THAT CRANE

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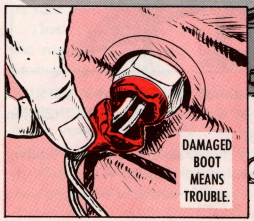

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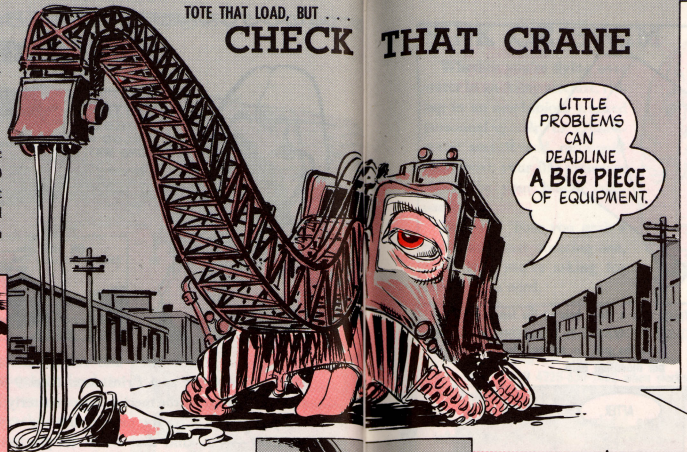

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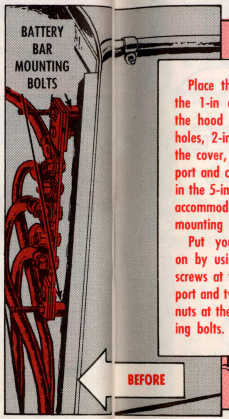
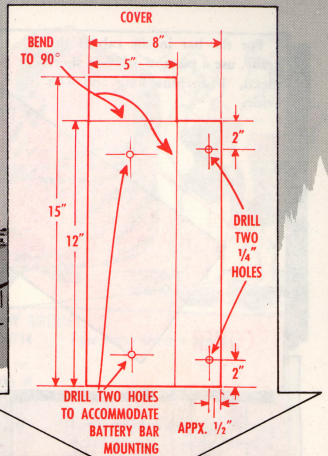
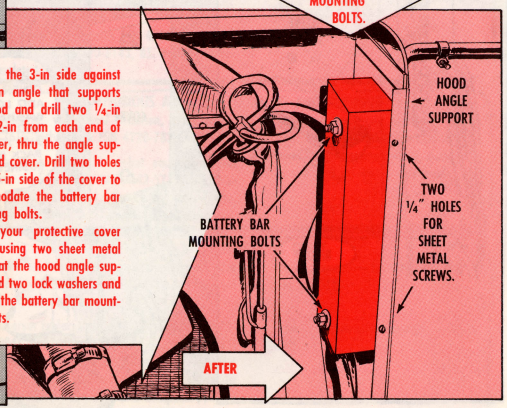




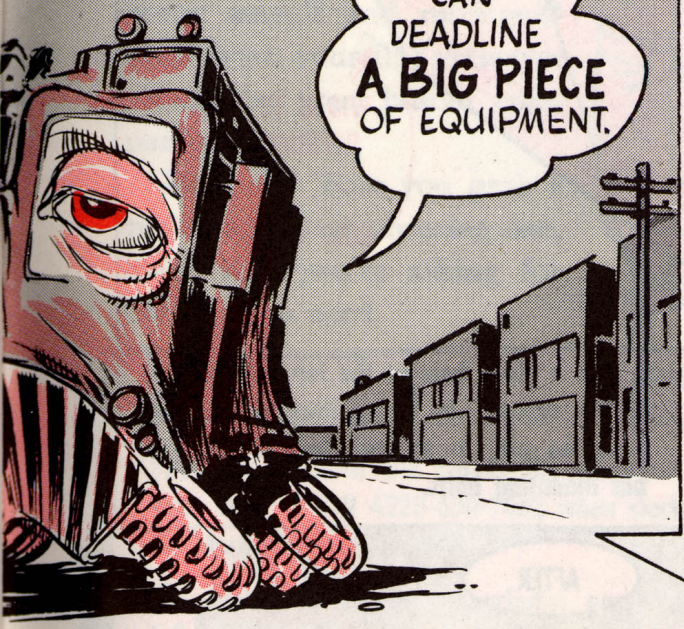
Place the 3-in side against the 1-in angle that supports the hood and drill two 1/4-in holes, 2-in from each end of the cover, thru the angle support and cover. Drill two holes in the 5-in side of the cover to accommodate the battery bar mounting bolts.

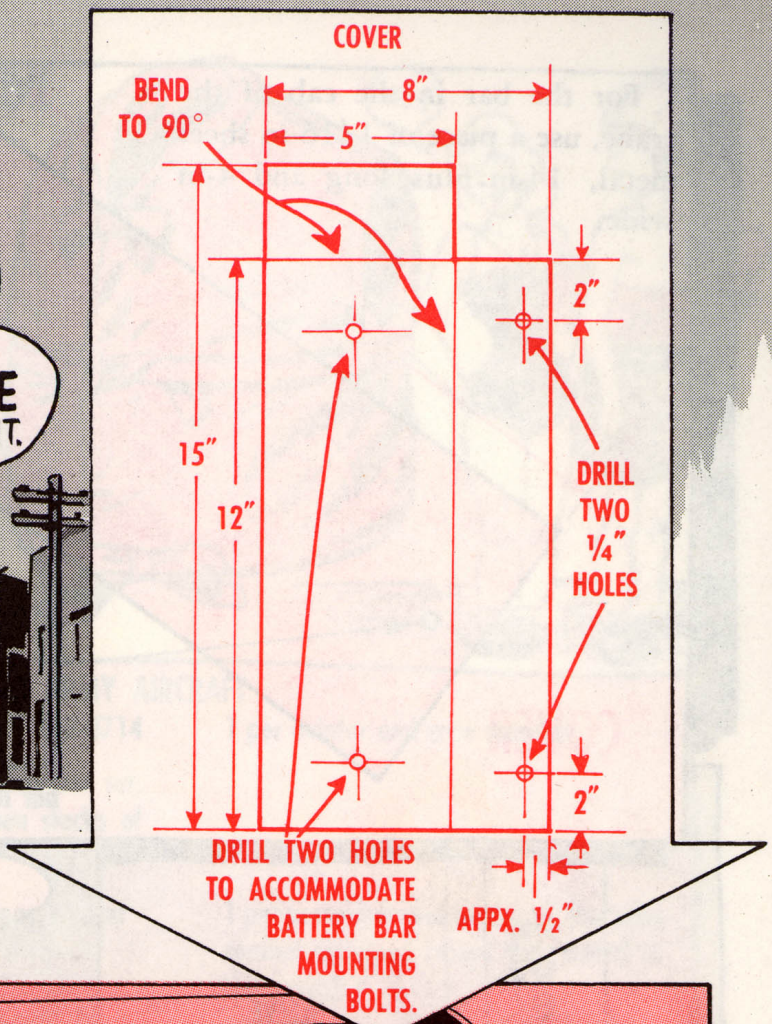
Put your protective cover on by using two sheet metal screws at the hood angle support and two lock washers and nuts at the battery bar mounting bolts.



DS PS MORE

THAT CRANE





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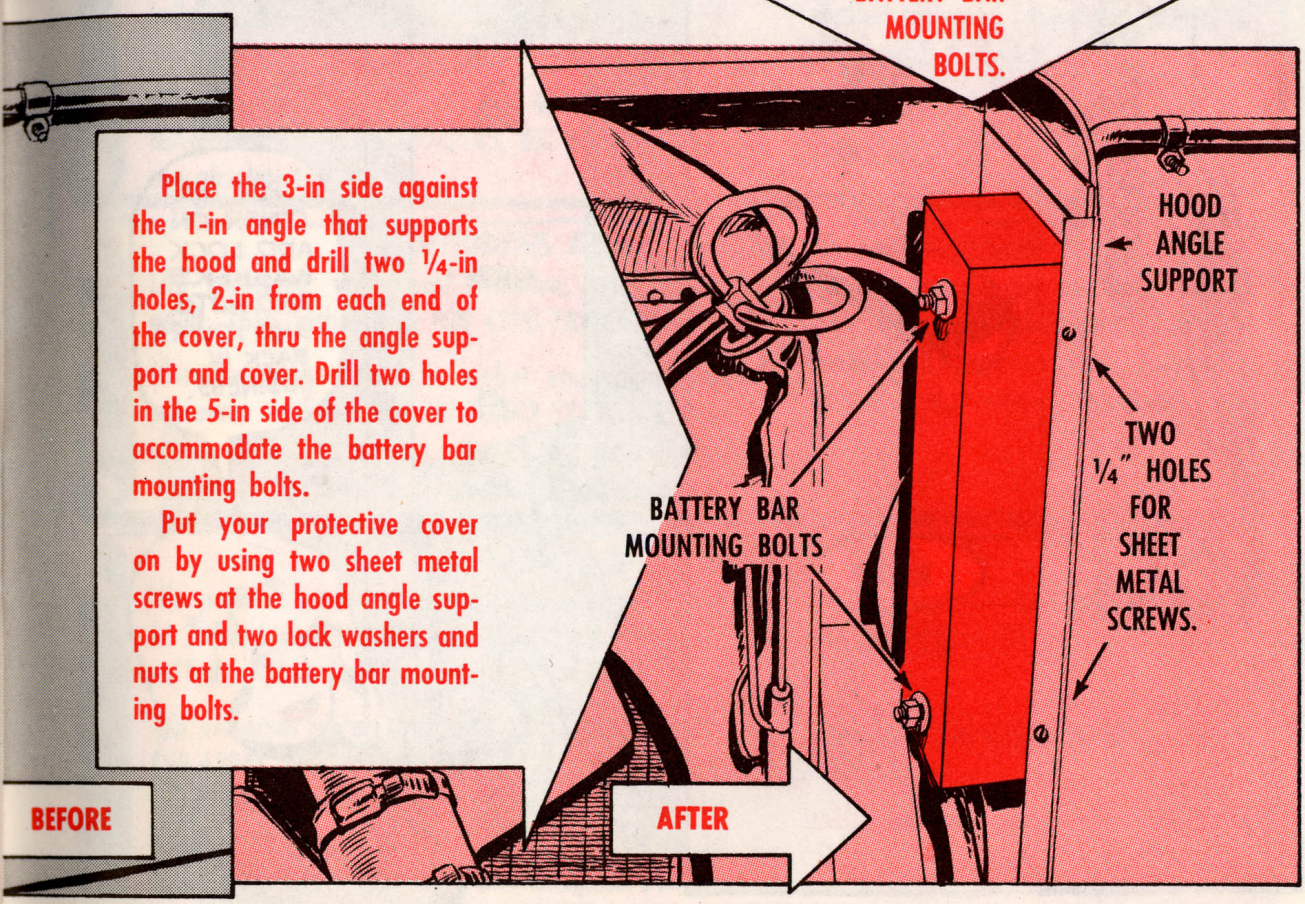
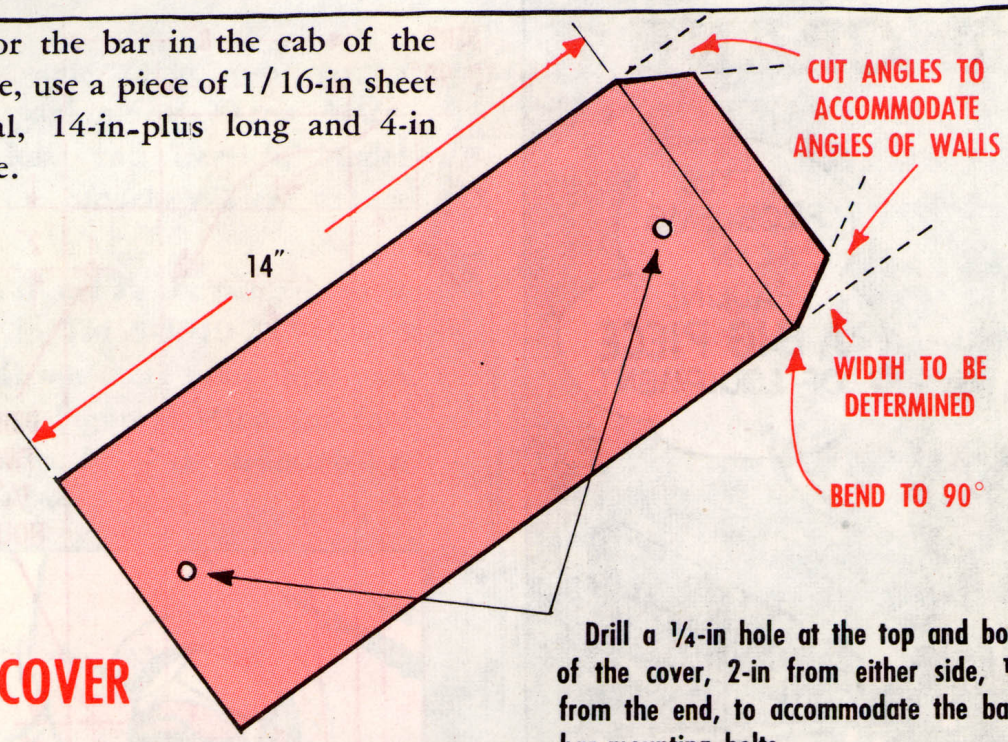


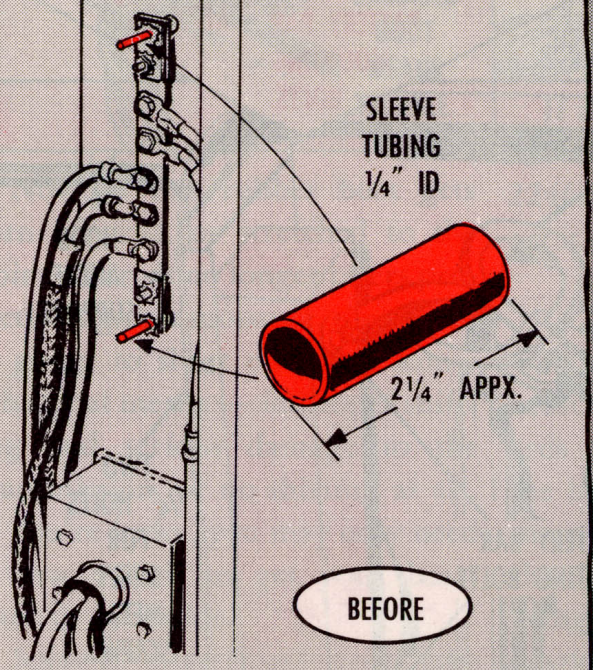
P.S. MORE

For the bar in the cab of the crane, use a piece of 1/16-in sheet metal, 14-in-plus long and 4-in wide.

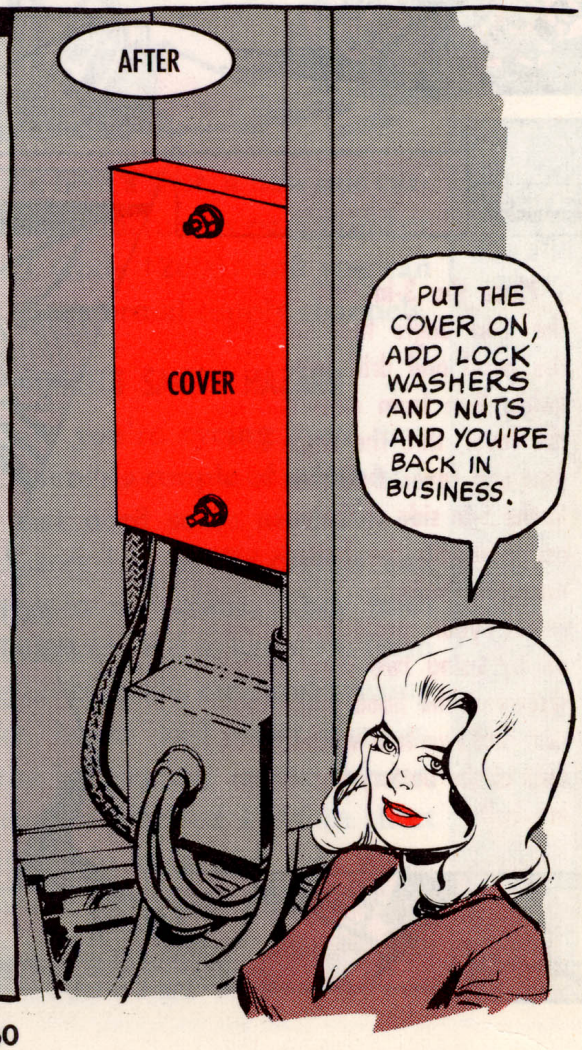


COVER

Drill a 1/4-in hole at the top and bottom of the cover, 2-in from either side, 1/2-in from the end, to accommodate the battery bar mounting bolts.



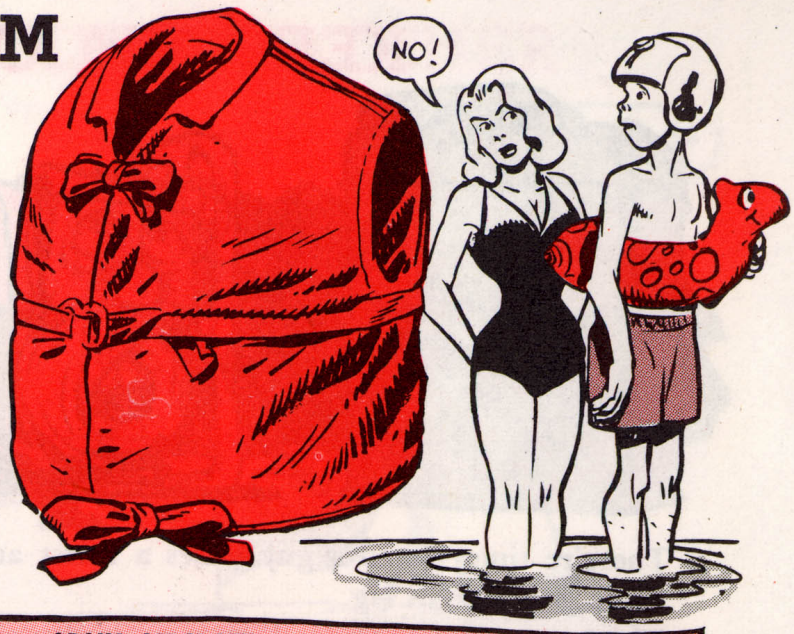
Cut two pieces of 1/4-in ID metal tubing about 2 1/4-in long and slide them over the battery bar mounting bolts so the cover won't be drawn up against the cables.



SINK OR SWIM

Whether you're flying over water in an Army aircraft, riding in an amphibious tracked personnel carrier, or a pneumatic assault and reconnaissance boat, your life preserver should be your bosom companion.

Hold on! 'Fore you grab a pencil and start ordering one, make sure you're asking for the one you need.



ARMY AIRCRAFT

Life preserver, underarm, aircraft FSN 4220-630-8714	1 per aviator and crew member
(This life preserver will replace life preserver set, vest, Mark II, FSN 4220-630-1463 when stocks of the Mark II are exhausted.)	
Life preserver, underarm, parachutist, gas or oral inflation, B7, FSN 4220-657-2197	1 per passenger seat in aircraft (Includes combat-equipped troops transported in the aircraft.)
(This life preserver replaces FSN 4220-329-7258, MA-2, and FSN 4220-620-6143, B5. Both of these are obsolete.)	

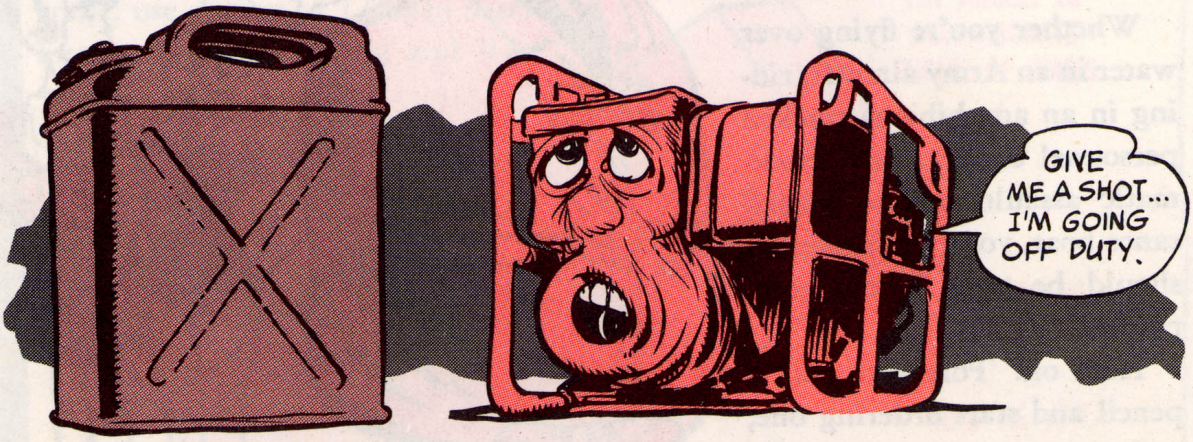
AMPHIBIOUS ASSAULT OPERATIONS AND MISSIONS

Life preserver, yoke, oral inflation, trapped air, adult, 26½ inches high FSN 4220-783-6609	1 per crewman and individual to be transported in amphibious tracked personnel and weapons carriers, pneumatic assault and reconnaissance boats, etc.
(Can be worn with full combat equipment. This preserver replaces FSN 4220-542-5717, life preserver, yoke, gas or oral inflation, w/gas cylinder, which will be issued until stocks are exhausted.)	

FLOATING AND AMPHIBIOUS CRAFT

Life preserver, vest fibrous glass filled, adult, size 24 inches high FSN 4220-200-0538 (Cannot be worn w/full combat equipment)	1 per crewman — LARC-V, LARC-XV, and LARC-LX
This preserver replaces FSN's 4220-250-6283, 4220-250-6284, 4220-287-3359, and 4220-702-2257, which will be issued until stocks are exhausted. FSN 4220-250-6283, life preserver, yoke type, is not to be used on oceangoing vessels.	1 per crewman and passenger — other craft

KEEP 'EM OILED



There're times when a guy raises a thirst and hankers for a drink. Same goes for his rig.

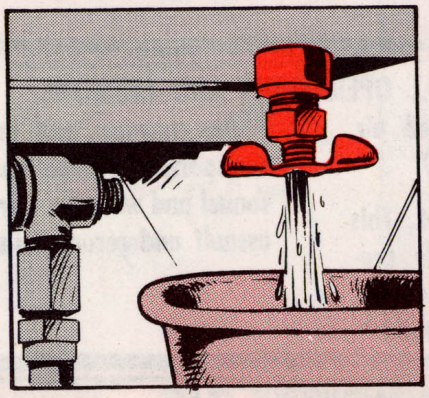
The fuel pumps on the military standard engine are a good f'rinstance . . . like the ones on your Winpower 1.5-KW generators.

Leaving gasoline in the fuel system when the engines are in storage or left standing idle for a long time can lead to fuel pump failures when you go to start 'em up.

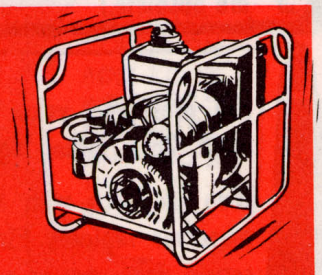
When the gasoline is allowed to remain in the fuel system on these rigs, it dissolves the coating from the fuel pump diaphragm.

To stay on the safe side, here's what you want to do when you're not planning to use your generator for a couple of months or so:

FIRST DRAIN THE GASOLINE FROM THE FUEL TANK.



THEN, DRAIN THE ENGINE BY LETTING IT RUN UNTIL IT STOPS FROM LACK OF FUEL

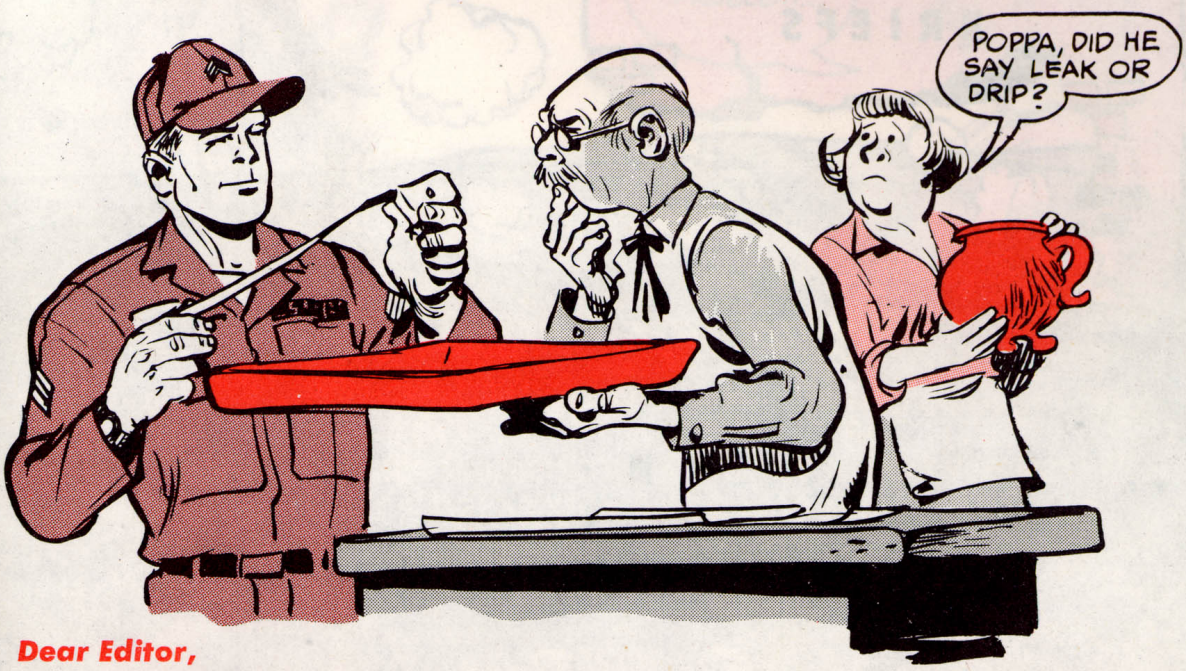


Then give the fuel pump a shot of OE-10, Lubricating Oil, Engine, (FSN 9150-265-9425, 1 qt; FSN 9150-265-9428, 5 gal), so you can get some oil into the works.

Next you add to the fuel tank, Lubricating Oil, Engine, type PE-2, grade 2 (MIL-L-21260), FSN 9150-264-3943, 5-gal. You can do this by fogging the inside of fuel tank with an atomizing spray gun.

Before you use your rig again, it would help if you'd flush the fuel system with gasoline.

PLASTIC DRIP CATCHER



Dear Editor,

Most units make their own oil drip pans or have their support outfit make them from galvanized sheets. But they're bulky, heavy, hard to clean and require maintenance whenever somebody steps on the edges or some vehicle runs over them.

We went out on local purchase and bought some polyethylene drip pans from a department store. They're lighter, easier to clean and spring back into shape if stepped on or run over.

The cost is about $3.20 each for a 24 by 36-in pan . . . and the polyethylene can be notched with a knife in order to hook two or more pans together. They can also be used for a lot of other things.

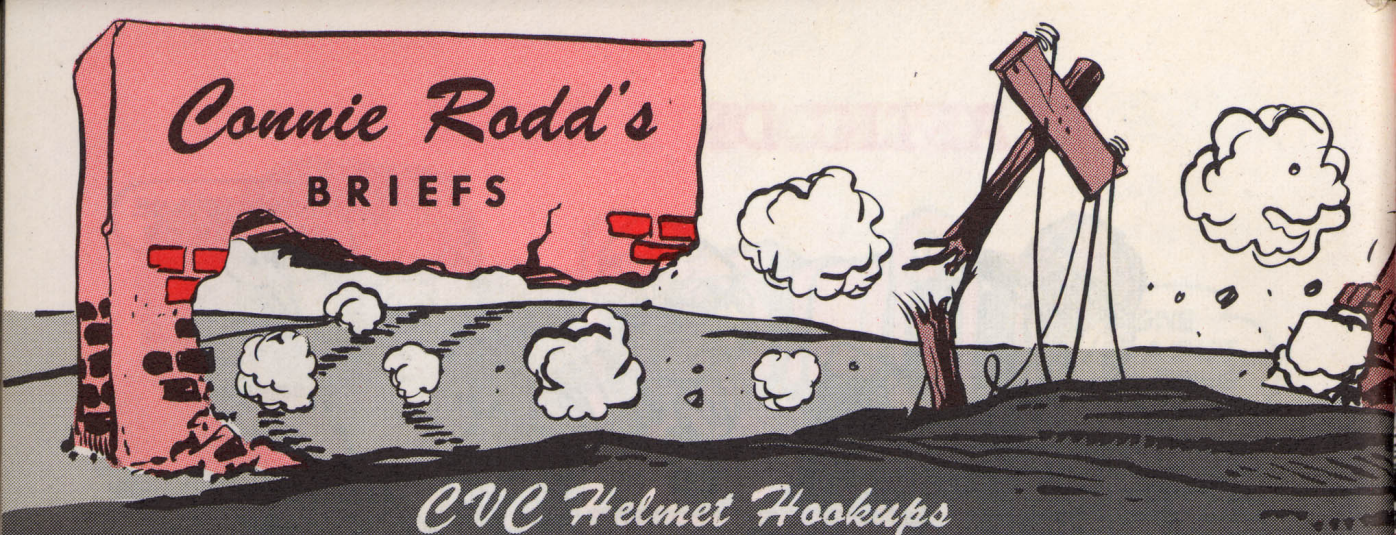
Enrique Hoffman
Fort Huachuca, Ariz.

(Ed Note—Sounds terrific! Although there's no polyethylene drip pan in the system, it can be added to your self-service store if enough maintenance types ask their supply support units for this item.)

DA FORM 2028

That's what you use to tell the TM and Supply Manual writers about any errors you find.

Fill out the 2028 and send it to the address you find in the front of the manual.



CVC Helmet Hookups

Are you having trouble latching onto a couple of cables for hooking up your T56-6 combat vehicle crewman's helmet with the VRC-12 Series radio set? No sweat. FSN 5995-858-5692 will get a CX-8650/GR lower retractile cord assembly and FSN 5995-064-5164 is for a CX-8655/GR upper cord assembly that clamps around the back of the helmet. Both cable assemblies are listed in TM 11-5965-235-25P (Dec 64) which covers parts for the MK-525 and -526 modification kits.

Signal Parts

Lookin' for the turn signal repair parts for your M151 ¼-ton truck? Can't find 'em? Then run down a copy of Change 2 to TM 9-2320-218-20P. Change 2 (Nov 65) gives with all the parts authorized to organizational level for the turn signal lights.

New M60 MG TM

Real potent. That's the new "consolidated" bible for the M60 machine gun—TM 9-1005-224-12 (Sep 65). It replaces three pubs. Count 'em: The old-12 with its four changes, the -20P and that part of LO 9-1000-228-12 (8 Apr 64) which covers lubrication of the M60 and its mount.

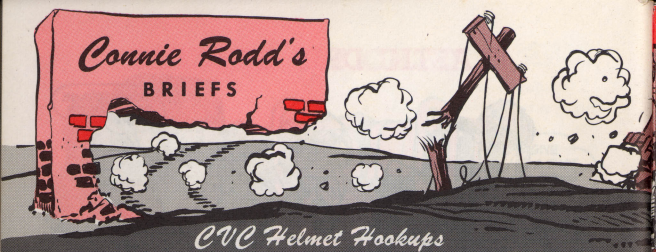
Bent Lunette

How much bend is allowable in the shank of a trailer lunette? The answer is N-O-N-E. Why so? Well, once it's bent or deformed the metal loses its elasticity. Bent or deformed lunettes must be replaced in the interests of safety to people, load, and to prevent breakdown on the road. So-o-o-o, no bends or distortion allowed.

A Sticky Situation

Heat, moisture and rubber can combine into a sticky situation. So if you want to protect rubber items—like rafts, inner tubes, etc. sprinkle them with powdered technical talc. FSN 6810-270-9989 gets you a 1-lb can; FSN 6810-270-9990, 2 lb can; or FSN 6810-270-9988, 5-lb can. You'll find these listed in C6800-IL (Jul 64).

Would You Stake Your Life right now on



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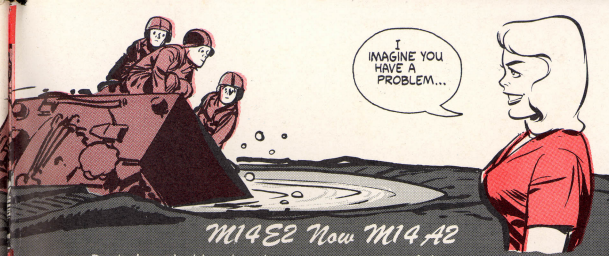


M14E2 Now M14A2

Don't do a double-take when you see mention of the M14A2 rifle. It's just the M14E2 under its new permanent model designation.

Fire Direction Sets

Having trouble locating FSN's, components and so forth for fire direction sets? Ease off. You'll find 'em all (artillery and tank and tank destroyer types) in SC 1290-95-CL-E01 (Jul 65).

FSN Switch

Remember the old Army saying, "It's permanent until it's changed"—well that's how it is with the 30-ft Gage and Hose assembly used to inflate the tires on your 5-ton G744 and 10-ton G792-series trucks. The latest is that when you need to replace this OEM item you'll need two FSN's to get it. Now FSN 4310-092-9265 fetches only the hose and FSN 4910-204-2547 brings the gage. Both of these FSN's are in the Federal and Army supply catalogs.

Indicator for M35A1

Now you can get a new air cleaner indicator for your M35A1 2½-ton truck (or other M44A1-series vehicle) by ordering FSN 2940-909-2453. It's listed in DoD Catalog C 2940-IL-A-CB4 (Feb 66). It's an authorized item for TM 9-2320-209-20P users.

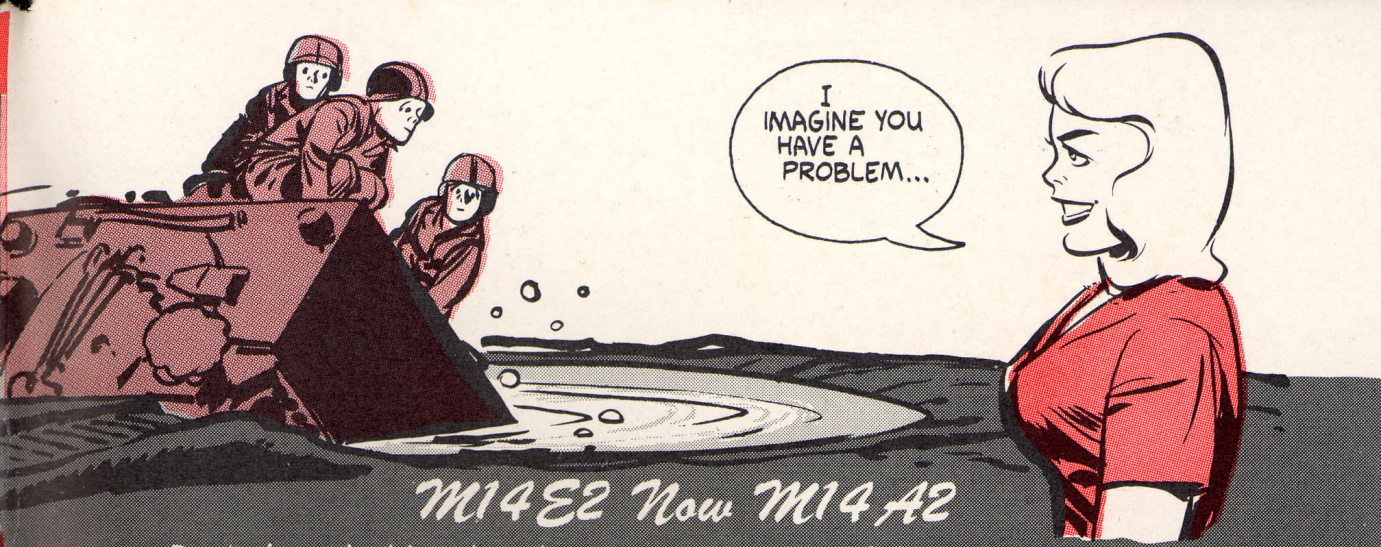
Tension Relief

The word is out on how to adjust the track tension on your M48A3 tanks. Just latch onto a copy of the new released TM 9-2350-224-10 (Jan 66) hot off the press. The poop's there—pictures and all.

Two Kits - One Supply Catalog

You'll find that SC 4910-95-CL-A74 (Sep 65) now carries two FSN's for the Tool Kit, Automotive Maintenance: Organizational Maintenance, Common No.1. FSN 4910-754-0654 (Line Item W32593) is used by everyone except MAP countries and they use FSN 4910-919-0098. (The air compressor is a part of their kit).

Would You Stake Your Life right now on the Condition of Your Equipment?



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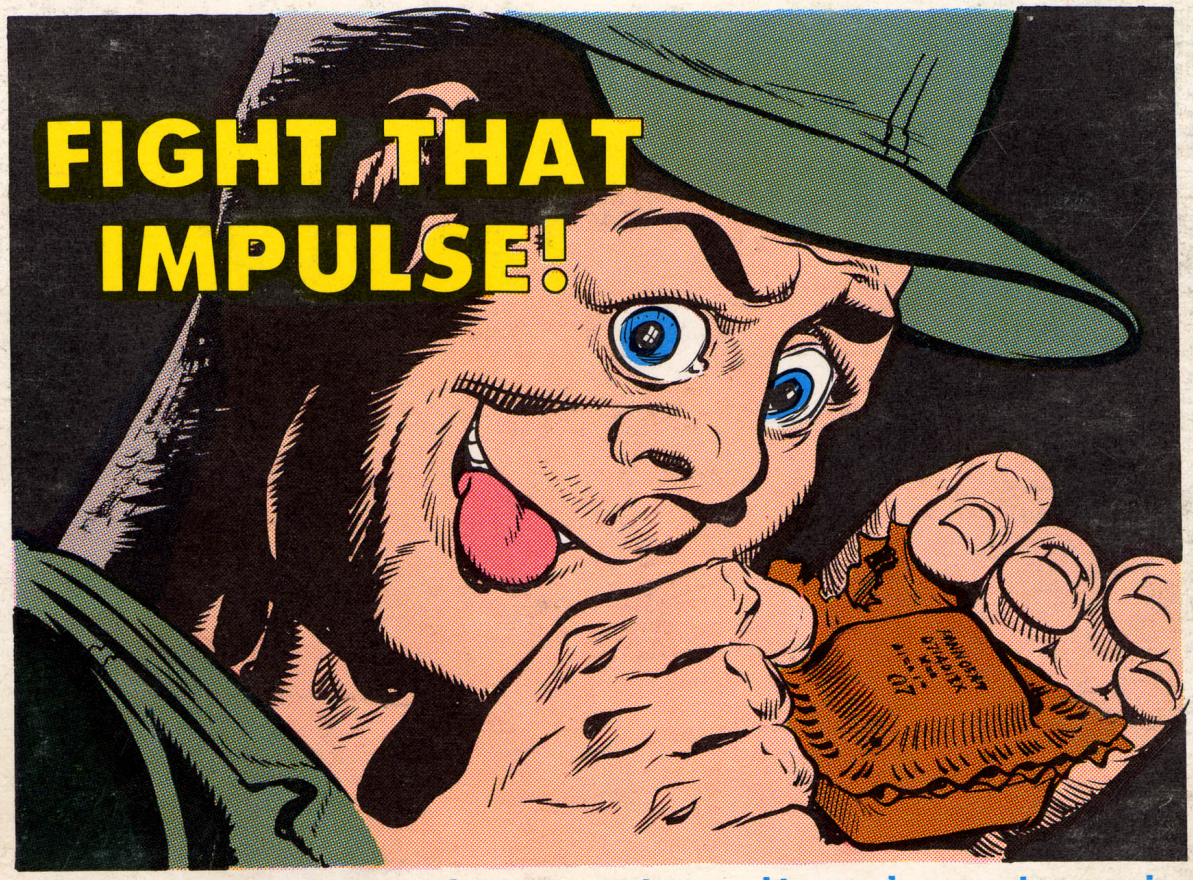

A great deal of money and science go into packing and preserving repair parts for shipment to the guys who need 'em. When you satisfy an idle curiosity to "peek" inside a package . . . you hurt a buddy, because:

1. YOU CAN NEVER RESEAL LIKE THE ORIGINAL

2. ONCE OPENED THE PART COLLECTS DUST AND MOISTURE

3. YOUR BUDDY GETS A DAMAGED PART . . . YOU FOUL UP THE WHOLE SUPPLY SYSTEM.

Keep Your Lint-Pickin' Paws Outta Packages Till You're Ready To Use The Parts.